3GPP TSG-RAN WG2 Meeting #116 electronic R2-2xxxxxx

Online, November 1-12, 2021

Source: RAN2 Chairman (MediaTek)

Title: Skeleton Notes

# AT-Meeting Email / Offline Discussion List, Main Session

Discussions with Deadline **Schedule 1**:

A **first round** with **Deadline for comments W1 Thur Feb 24th 1200 UTC** to settle scope what is agreeable etc

A Final round with **Final deadline W2 Wed March 2nd 1200 UTC** to settle details / agree CRs etc.

Additional deadlines check points etc if needed are defined by the Rapporteur of each discussion respectively. In case some parts of an email discussion need more time, doesn’t converge, need not yet planned on-line treatment, then Rapporteur please contact chair.

* [AT117-e][000] Organizational Main (Chair)

Scope: Opening and closing of the meeting, Treat AIs 1 & 2, LSes that do not need actions. Anything going beyond other discussions can be raised, for the meeting or Main session.

Deadline: EOM

Numbers **[001] – [024]** used for Pre Discussions

* [AT117-e][025][NR15] User-plane Corrections (Huawei)

Scope: Treat [R2-2202109](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202109.zip), [R2-2203129](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203129.zip), [R2-2203130](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203130.zip), [R2-2203241](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203241.zip), [R2-2203242](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203242.zip), [R2-2203240](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203240.zip), [R2-2202552](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202552.zip), [R2-2202553](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202553.zip), [R2-2203239](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203239.zip), [R2-2202194](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202194.zip). Ph1 Determine agreeable parts. P2 agree CRs for agreeable parts.

Intended outcome: Report, Agreed CRs.

Deadline: Schedule 1

* [AT117-e][026][NR15] NAS procedure not subject to UAC (Apple)

Scope: Treat [R2-2202104](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202104.zip), [R2-2202535](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202535.zip), [R2-2202536](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202536.zip), [R2-2202537](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202537.zip), [R2-2202538](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202538.zip), [R2-2203487](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203487.zip). Ph1 Determine agreeable parts, Ph2 For agreeable parts, progress CRs, and reply LS out.

Intended outcome: Report, Agreed CRs, Approved LS out.

Deadline: Schedule 1

* [AT117-e][027][NR15] RRC misc I (Ericsson)

Scope: Treat [R2-2202106](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202106.zip), [R2-2202272](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202272.zip), [R2-2202273](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202273.zip), [R2-2202393](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202393.zip), [R2-2203498](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203498.zip), [R2-2203499](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203499.zip), [R2-2203335](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203335.zip), [R2-2203336](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203336.zip)

Ph1 Determine agreeable parts, Ph2 For agreeable parts, progress CRs.

Intended outcome: Report, Agreed CRs

Deadline: Schedule 1

* [AT117-e][028][NR15] RRC misc II (Intel)

Scope: Treat [R2-2202637](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202637.zip), [R2-2202638](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202638.zip), [R2-2202639](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202639.zip), [R2-2203327](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203327.zip), [R2-2203328](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203328.zip)

Ph1 Determine agreeable parts, Ph2 For agreeable parts, progress CRs

Intended outcome: Report, Agreed CRs.

Deadline: Schedule 1

* [AT117-e][029][NR15] RRC Inter-Node Signalling (Nokia)

Scope: Treat [R2-2202121](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202121.zip), [R2-2203500](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203500.zip), [R2-2203501](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203501.zip), [R2-2202806](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202806.zip), [R2-2202807](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202807.zip), [R2-2202808](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202808.zip), [R2-2202123](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202123.zip), [R2-2203321](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203321.zip), [R2-2203322](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203322.zip). Ph1 Determine agreeable parts, Ph2 For agreeable parts, progress CRs, (reply LSes out only if needed).

Intended outcome: Report, Agreed CRs

Deadline: Schedule 1

* [AT117-e][030][NR16] User-plane Related Corrections (vivo)

Scope: Treat [R2-2202524](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202524.zip), [R2-2202110](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202110.zip), [R2-2202326](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202326.zip) (RRC CR), [R2-2203484](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203484.zip), [R2-2203131](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203131.zip).

Ph1 Determine agreeable parts. P2 agree CRs for agreeable parts.

Intended outcome: Report, Agreed CRs.

Deadline: Schedule 1

* [AT117-e][031][NR16] Connection Control I (Ericsson)

Scope: Treat [R2-2203408](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203408.zip), [R2-2202228](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202228.zip), [R2-2203410](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203410.zip), [R2-2203255](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203255.zip), [R2-2203132](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203132.zip), [R2-2202232](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202232.zip), [R2-2203438](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203438.zip). Ph1 Determine agreeable parts, Ph2 for agreeable parts, progress CRs.

Intended outcome: Report, Agreed CRs.

Deadline: Schedule 1

* [AT117-e][032][NR1615] Connection Control II (Lenovo)

Scope: Treat [R2-2203407](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203407.zip) (or 3706), [R2-2203267](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203267.zip), [R2-2202835](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202835.zip), [R2-2202836](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202836.zip), [R2-2202872](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202872.zip), [R2-2202876](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202876.zip), [R2-2202222](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202222.zip), [R2-2202915](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202915.zip), [R2-2203477](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203477.zip), [R2-2202917](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202917.zip). Ph1 Determine agreeable parts, Ph2 for agreeable parts, progress CRs.

Intended outcome: Report, Agreed CRs.

Deadline: Schedule 1

* [AT117-e][033][NR1615] RRC Other (Samsung)

Scope: Treat [R2-2202296](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202296.zip), [R2-2202297](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202297.zip), [R2-2202298](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202298.zip), [R2-2202763](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202763.zip), [R2-2202990](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202990.zip), [R2-2202991](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202991.zip), [R2-2203439](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203439.zip), [R2-2203441](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203441.zip), [R2-2203442](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203442.zip). Ph1 Determine agreeable parts, Ph2 for agreeable parts, progress CRs.

Intended outcome: Report, Agreed CRs.

Deadline: Schedule 1

* [AT117-e][034][NR16] UE capabilities I (Intel)

Scope: Treat [R2-2202146](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202146.zip), [R2-2202107](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202107.zip), [R2-2202665](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202665.zip), [R2-2203163](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203163.zip), [R2-2203167](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203167.zip), R2-22002195, [R2-2202196](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202196.zip), [R2-2203488](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203488.zip), [R2-2202293](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202293.zip). Ph1 Determine agreeable parts, Ph2 for agreeable parts, progress CRs.

Intended outcome: Report, Agreed CRs.

Deadline: Schedule 1

* [AT117-e][035][NR1615] UE capabilities II (Huawei)

Scope: Treat [R2-2202810](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202810.zip), [R2-2202811](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202811.zip), [R2-2203268](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203268.zip), [R2-2203492](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203492.zip), [R2-2202229](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202229.zip), [R2-2202108](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202108.zip), [R2-2203510](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203510.zip), [R2-2203490](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203490.zip), [R2-2203491](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203491.zip), [R2-2203409](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203409.zip), [R2-2202525](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202525.zip), [R2-2202526](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202526.zip). Ph1 Determine agreeable parts, Ph2 for agreeable parts, progress CRs.

Intended outcome: Report, Agreed CRs.

Deadline: Schedule 1

* [AT117-e][036][NR1516] Idle Inactive procedures (Lenovo)

Scope: Treat [R2-2202539](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202539.zip), [R2-2202220](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202220.zip), [R2-2202221](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202221.zip). Ph1 Determine agreeable parts, Ph2 for agreeable parts, progress CRs.

Intended outcome: Report, Agreed CRs.

Deadline: Schedule 1

* [AT117-e][037][R17] ASN.1 review (Ericsson)

Scope: Start after on-line. Discuss the details,

Intended outcome: Enhanced ASN.1 review process, Detailed plan.

Deadline: EOM

* [AT117-e][038][NR17] UE caps Main (Intel)

Scope: Treat [R2-2202662](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202662.zip), [R2-2202113](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202113.zip), [R2-2202154](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202154.zip), [R2-2202657](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202657.zip), [R2-2202658](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202658.zip), Progress UE capabilities based on R1 and R4 feature lists, following the plan in [R2-2202662](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202662.zip), if needed determine questions for LS out. Record found Open Issues. This discussion is expected to continue as a post discussion after R2 117-e, merging UE capabilities from endorsed WI specific CRs (or draft CRs).

Intended outcome: Report, R17 NR UE Cap Mega CRs 38306 38331,

Deadline: Intermediate deadlines by Rapporteur, check point at EOM to see if partial endorsement is possible (to limit/focus the scope for the post discussion).

* [AT117-e][039][NR17] Gaps Coordination (MediaTek)

Scope: Ph1: Take into account [R2-2202985](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202985.zip), [R2-2203346](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203346.zip), [R2-2202864](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202864.zip), [R2-2202888](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202888.zip), [R2-2202943](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202943.zip), [R2-2202209](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202209.zip), [R2-2202321](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202321.zip). Identify points for coordination that seems immediately agreeable. Determine whether LS out to RAN4 is needed. Lower priority: can also attempt to identify Open Issues that may be helpful for further work in Q2.

Ph2: LS approval

Intended outcome: Ph2 Approved LS out to R4

Deadline: Ph2 EOM

* [AT117-e][040][MBS] Reply LS on max no of MBS sessions that can be associated to a PDU session (Ericsson)

Scope: Collection opinions and determine agreements in order to reply to Reply to LS in R2-2200141 (received at R2 116bis-e)

Intended outcome: Agreeable LS out (and a Report if applicable).

Deadline: W1 Thursday (for on-line CB W1 Friday)

* [AT117-e][041][MBS] CR and Rapporteur Resolutions (Huawei)

Scope: For all CR Rapporteur resolutions, and the updated CRs, Collect comments, Address simple comments, to reach endorsable state. Aim to agree the CR Rapporteur resolutions and endorse the CRs (such that changes-on-changes redundant editors notes etc then can be removed). For MAC, the rapporteur proposes two options, a choice should be made. Rapporteur of this discussion is responsible for collecting comments into a document, and report on those. Each CR rapporteur is responsible for CR update, if update is needed.

Intended outcome: Report. Agreement of Resolutions to Rapporteur issues. CRs, revised if needed, that are endorsable.

Deadline: W1 Thursday (for on-line endorsement W1 Friday)

CLOSED

* [AT117-e][042][MBS] Invited tdocs open Issues UP (Samsung)

Scope: Take into account submitted tdocs. Address the FFS on CSI and SRS reporting due to MBS DRX, and from the updated OIlist: Small correction on RX\_DELIV formula to avoid HFN<0. Determine agreeable part, pave the way for on-line agreement.

Intended outcome: Report

Deadline: W1 Thursday (for online CB W1 Friday).

* [AT117-e][043][MBS] Invited tdocs open Issues CP (Nokia)

Scope: PH1: Take into account submitted tdocs. Address the questions in R3-221469 LS on NR RRC to support split NR-RAN architecture for NR MBS. Determine agreeable part, pave the way for on-line agreement. CLOSED

PH2: Continue offline discussion on P2, clarify the intentions (one/two messages, determine the coverage of the part that could be common = same between UEs).

Intended outcome: Report

Deadline: PH2 in time for on-line CB W2 Wednesday

* [AT117-e][044][MBS] UE capabilities (MediaTek)

Scope: Ph1 Collect comments on the initial CRs in [R2-2202786](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202786.zip), [R2-2202787](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202787.zip), as a basis for further updates. Treat [R2-2202269](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202269.zip), [R2-2202671](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202671.zip), [R2-2203118](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203118.zip), [R2-2203120](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203120.zip). Avoid overlap with the other issues discussions. Determine agreeable parts, discussion points etc.

Intended outcome: Report

Deadline: W1 Thursday, for online CB W1 Friday.

* [AT117-e][045][QoE] RRC CR (Ericsson)

Scope: Review the CR provided in [R2-2203428](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203428.zip), including the proposed R2117e New resolutions to capture the impact due to LS’ins, including check of previous meeting updates (as there was no formal endorsement). IF new LSes arrive during the meeting, they can be taken into account offline by this email discussion.

Intended outcome: ph1: Endorsable CR, Report if applicable.

Deadline: VERY SHORT ph1 W1 Wednesday (for online endorsement W1 Thursday).

* [AT117-e][046][QoE] Invited tdocs Open Issues (Ericsson)

Scope: Consider the invited input, and tdocs provided under 8.14.3.2 excluding issues handled in [R2-2202878](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202878.zip), or in the RRC CR, or under 8.14.4 or issues where we are still waiting for input from other groups (there is overlap in some tdocs). For the invited input and non-excluded contents, determine agreeable parts, discussion points and remaining open issues (if any). Determine need for LS outs if any.

Intended outcome: Report

Deadline: W1 Friday (for online CB W2 Monday).  
CLOSED

* [AT117-e][047][QoE] UE capability (CMCC)

Scope: Treat [R2-2202827](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202827.zip), [R2-2202988](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202988.zip), [R2-2203347](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203347.zip), [R2-2203404](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203404.zip), [R2-2203429](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203429.zip), determine agreeable parts and discussion points. Determine need for LS outs if any.

Intended outcome: Report

Deadline: W1 Friday (for online CB W2 Monday).

CLOSED

* [AT117-e][048][eNPN] Open Issues (Nokia)

      Scope: Treat tdocs on open issues: [R2-2202208](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202208.zip), [R2-2202620](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202620.zip), [R2-2202832](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202832.zip), [R2-2202855](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202855.zip), [R2-2202889](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202889.zip), [R2-2202896](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202896.zip), [R2-2202898](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202898.zip), [R2-2203075](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203075.zip), [R2-2203264](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203264.zip), [R2-2203447](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203447.zip), Also, review the CR in [R2-2202636](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202636.zip) and consider the open issues listed there, for UE capabilities.

      Intended outcome: Report

      Deadline: W1 Friday (for on-line CB W2 Monday).

CLOSED

* [AT117-e][049][NR17TEI] In-principle Agreed CRs and related docs (ZTE)

Scope: Treat [R2-2202225](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202225.zip), [R2-2202395](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202395.zip), [R2-2202396](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202396.zip), Has comments: [R2-2202397](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202397.zip), [R2-2202398](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202398.zip), [R2-2202399](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202399.zip), [R2-2202400](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202400.zip), [R2-2202626](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202626.zip), [R2-2202627](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202627.zip), [R2-2202628](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202628.zip), [R2-2202629](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202629.zip), R2-22083306, Non-IPA: [R2-2202608](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202608.zip). Check IPA CRs, and determine revisions if needed. Take into account the comments provided in [R2-2202225](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202225.zip). Determine whether the not yet agreed CR in [R2-2202608](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202608.zip) or some variant is agreeable.

Intended outcome: Report, Agreed CRs, Endorsed NR UE cap CRs (for merge)

Deadline: Schedule 1

* [AT117-e][050][NR17TEI] Explicit Indication of SI Scheduling start position (Ericsson)

Scope: Treat [R2-2203365](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203365.zip)

Intended outcome: Agreed CR.

Deadline: W1 Friday (if possible)

* [AT117-e][051][UDC] Open Issues and CRs (CATT)

Scope: Ph1 Address the UDC Open Issues aiming to close all, Collect comments on major issues and/or blocking points in the provided CRs if any.

Ph2 Continued discussion aiming for CR agreement (offline only).

Intended outcome: Report if useful ,Agreed CRs and endorsed UE capability CRs (for Merge)

Deadline: EOM (if Needed, the non-UE cap CRs can continue in a Post disc).

* [AT117-e][052][NR17] IPA CRs (Xiaomi)

Scope: Treat [R2-2202765](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202765.zip), [R2-2202766](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202766.zip), [R2-2203714](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203714.zip), [R2-2203715](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203715.zip), [R2-2203123](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203123.zip), [R2-2203124](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203124.zip), [R2-2202151](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202151.zip), [R2-2203138](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203138.zip), [R2-2203139](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203139.zip), [R2-2203322](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203322.zip), [R2-2203323](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203323.zip). Check the CRs (incl cover sheet) determine revisions if needed. Agree CRs (submitted or revisions).

Intended outcome: Report, Agreed CRs, Endorsed UE cap CRs (or draft CRs) (38306, 38331) for Merge.

Deadline: Schedule 1

* [AT117-e][053][NR17] UL TX Switching (China Telecom)

Scope: Treat [R2-2203117](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203117.zip), [R2-2202812](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202812.zip), [R2-2202814](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202814.zip), [R2-2203114](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203114.zip), [R2-2202813](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202813.zip), [R2-2203115](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203115.zip), [R2-2203116](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203116.zip). Determine agreeable parts. Agree/endorse CRs.

Intended outcome: Report, Agreed CRs, Endorsed UE cap CRs (or draft CRs) (38306, 38331) for Merge.

Deadline: EOM

* [AT117-e][054][NR17] PUCCH SCell Activation (Huawei)

Scope: Delay start of this discussion until R1 has provided another LS (expected end of W1), and take the R1 LS and decisions into account. Treat [R2-2202815](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202815.zip), [R2-2202816](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202816.zip), [R2-2202817](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202817.zip), [R2-2202499](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202499.zip), [R2-2202450](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202450.zip), [R2-2202884](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202884.zip), [R2-2203318](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203318.zip), [R2-2202219](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202219.zip). Determine agreeable parts, e.g. whether TS change is needed and for which release. Agree CRs if applicable and LS out.

Intended outcome: Report, Approved LS out, Agreed CRs (if applicable)

Deadline: EOM

CANCELLED

* [AT117-e][055][NR17] PUCCH SCell Activation Invalid TA (CATT)

Scope: Delay start of this discussion until R1 has replied to the LS in R2-2200133/R4-2120420, and take the R1 reply into account. Treat [R2-2202149](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202149.zip), [R2-2203016](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203016.zip), [R2-2203017](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203017.zip)

Intended outcome: Report, Approved LS out (if need for TS change is identified, outcome should also include CRs).

Deadline: EOM

* [AT117-e][056][NR17] FR1 HST (CMCC)

Scope: Treat [R2-2202171](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202171.zip), [R2-2202157](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202157.zip), [R2-2202869](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202869.zip), [R2-2202870](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202870.zip). Ph1 Determine agreeable parts and converge on discussion points if any, Ph2 agree CRs (and Reply LS only if needed).

Intended outcome: Report, Agreed CR 38331, endorsed UE cap CRs (or draft CRs) (38306, 38331) for Merge.

Deadline: Schedule 1

* [AT117-e][057][NR17] FR2 HST (Nokia)

Scope: Treat [R2-2202167](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202167.zip), [R2-2203187](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203187.zip), [R2-2203188](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203188.zip), [R2-2202867](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202867.zip),. Ph1 Determine agreeable parts and converge on discussion points if any, Ph2 agree CRs (and Reply LS only if needed).

Intended outcome: Report, Agreed CR 38331, endorsed UE cap CRs (or draft CRs) (38306, 38331) for Merge.

Deadline: Schedule 1

* [AT117-e][058][NR17] FR2 UL Gap (Apple)

Scope: Treat [R2-2202155](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202155.zip), [R2-2202156](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202156.zip), R2-2202508, [R2-2202918](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202918.zip), [R2-2202510](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202510.zip), [R2-2202511](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202511.zip), [R2-2202507](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202507.zip), [R2-2202509](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202509.zip). Ph1 Determine agreeable parts and converge on discussion points if any, Ph2 agree CRs (and Reply LS only if needed).

Intended outcome: Report, Agreed CRs, endorsed UE cap CRs (38306, 38331) for Merge.

Deadline: Schedule 1

* [AT117-e][059][NR17] FR2 CA BW Classes and CBM (Nokia)

Scope: Treat [R2-2202377](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202377.zip), [R2-2202904](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202904.zip), [R2-2203122](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203122.zip), [R2-2203024](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203024.zip), [R2-2202905](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202905.zip), [R2-2202389](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202389.zip), [R2-2202390](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202390.zip), [R2-2202910](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202910.zip), [R2-2202911](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202911.zip), [R2-2202912](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202912.zip), [R2-2202913](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202913.zip), [R2-2203493](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203493.zip), [R2-2203494](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203494.zip), [R2-2202365](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202365.zip), [R2-2202366](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202366.zip). Ph1 Determine agreeable parts and converge on discussion points if any, Ph2 agree CRs and Reply LS out.

Intended outcome: Report, Agreed CRs (CRs with certain early impl. character need to be separate CRs), Approved LS out

Deadline: Schedule 1

* [AT117-e][060][NR17] DSS (Ericsson)

Scope: Treat [R2-2202214](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202214.zip), [R2-2202215](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202215.zip), [R2-2202216](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202216.zip). Take into account an expected RAN1 LS to resolve Open issues for CR in [R2-2202216](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202216.zip). If the expected LS arrives late, e.g. at EOM, the discussion can be continued as a Post meeting discussion.

Intended outcome: Report, Agreed CRs

Deadline: EOM.

* [AT117-e][061][NR17] n77 variants (Bell Mobility)

Scope: Treat [R2-2202183](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202183.zip). Collect one round of comments, based on comments determine whether any action need to be taken by RAN2 (or whether to just wait for RAN4). IF actions are to be taken, CB online W2 Monday

Intended outcome: Report

Deadline: W1 Friday

* [AT117-e][062][NR17] MINT (Ericsson)

Scope: Treat [R2-2202176](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202176.zip), [R2-2202226](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202226.zip), [R2-2202264](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202264.zip), [R2-2202256](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202256.zip), [R2-2202257](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202257.zip), [R2-2202258](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202258.zip), [R2-2202259](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202259.zip), [R2-2202260](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202260.zip), [R2-2202261](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202261.zip), [R2-2202262](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202262.zip), [R2-2202263](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202263.zip). Ph1 Check the CRs, converge on discussion points if any and determine agreeable parts, Ph2 finally agree CRs.

Intended outcome: Report, Agreed CRs, endorsed NR UE cap CRs (38306, 38331) for Merge.

Deadline: EOM.

ADDED W1 Monday

* [AT117-e][009][feMIMO] RRC 1 (Ericsson)

Scope: Take into account on-line. Make further progress based on non-resolved parts of [R2-2203050](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203050.zip) if any. Progress P10 and P14 from [R2-2203719](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203719.zip). Take into account new LS from RAN1 when/if it becomes available, to the extent reasonable. Update RRC CR. (this discussion will also continue as a post discussion for the CR). Determine agreeable parts, identify discussion points if any.

Intended outcome: Report, revised RRC CR (CR might not be needed for CB).

Deadline: In time for online CB W2 Wednesday

* [AT117-e][063][feMIMO] LS out (Ericsson)

Scope: Initial LS out, asking questions to R1 according to initial on-line discussion. Can also discuss other easily agreeable or potentially necessary questions to ask R1, if any.

Intended outcome: Approved LS out.

Deadline: W1 Friday

* [AT117-e][011][IoT-NTN] User Plane (OPPO)

Scope: Based on [R2-2203160](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203160.zip) and related on-line discussion + based on [R2-2203721](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203721.zip) issue on cfg of event triggered TA report and issue Whether SR is triggered if no available/sufficient UL-SCH resources for the triggered TA reporting.

- For items that are dependent on NR NTN, kick off the relevant discussion points once NR NTN decision has been taken. For items with no dependency, discussion can be kicked off immediately, and result should be ready for first CB occasion.

- Determine agreeable parts, Aim to agree less controversial points offline (with no CB). Identify CB points. Controversial points and/or very late points (with no time for offline decision) can CB on-line.

Intended outcome: Report

Deadline: CB W2 Thursday.

* [AT117-e][012][IoT-NTN] Control Plane (Huawei)

Scope: Based on [R2-2203221](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203221.zip) progress P5a and P7, address whether to move t-service to other SIB, address P5 from R2-22003721, Include OI 2.11 and OI 2.12 from AI 9.2.5. based on [R2-2203220](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203220.zip) progress the details, based on [R2-2203457](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203457.zip) (Ericsson), progress the details (proponent to drive the argumentation if any). Determine agreeable parts, Aim to agree offline, if needed identify CB points.

Intended outcome: Report.

Deadline: CB W2 Thursday.

* [AT117-e][015][IoT-NTN] Miscellaneous Issues (MediaTek)

Scope: Based on [R2-2203721](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203721.zip) (and related summarized input), Include OI 2.13 and OI 2.14 from AI 9.2.5, and progress the following:

- P3 on cell reselection priority

- Location Reporting in IoT-NTN, and kick this part off as soon as LS reply is received (e.g. for NB-IoT), and/or as soon as relevant progress is achieved for NR NTN (e.g. for eMTC).

- UE report of remaining GNSS validity duration (Chair comment: this is a R1 agreement and can thus be followed, however the R1 agreed range might not be sufficient for this reporting to be useful, suggest to discuss this).

- For Prediction of discontinus coverage, on using mean parameters: Can attempt to address/elaborate the earlier defined FFS: *FFS whether additional assumptions (like averaging time) need to be clarified, e.g. to have predictable performance*, and other relevant considerations, if any.

- For Prediction of discontinus coverage, on estimating radio coverage with higher spatial accuracy: additional new parameters, like satellite footprint reference location on ground and coverage radius (condition that they shall be defined without RAN1 involvement).

- Determine agreeable parts, Aim to agree less controversial points offline (with no CB). Identify CB points.

Intended outcome: Report

Deadline: In time for first on-line CB W2 Tuesday, later CB TBD.

* [AT117-e][064][IoT-NTN] UE capabilites (Nokia)

Scope: a) review the CR (it is new) b) based on Input to 9.2.4, address the open issues. Determine agreeable parts, identify discussion points and pave the way for efficient on-line CB. For OI4.4 focus for now on the need, rather than solutions, e.g. attempt to identify which capabilities should be indicated per deployment option, if any.

Intended outcome: Report

Deadline: In time for on-line CB W2 Tuesday

* [AT117-e][018][MGE] Pre-configured MG patterns (Intel)

Scope: Based on [R2-2203523](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203523.zip), progress remaining proposals. Determine agreeable parts, points for discussion, open issues if needed. Converge as far as possible to reduce the need for on-line discussion

Intended outcome: Report

Deadline: In time for on-line CB W2 Tuesday

* [AT117-e][019][MGE] Network Controlled Small Gap (Apple)

Scope: Based on [R2-2203713](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203713.zip), determine agreeable parts, points for discussion, open issues if needed. Converge as far as possible to reduce the need for on-line discussion.

Intended outcome: Report

Deadline: In time for on-line CB W2 Tuesday

* [AT117-e][020][MGE] UE capabilites (Intel)

Scope: Ph1:Based on [R2-2203522](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203522.zip). Determine agreeable parts, points for discussion, open issues if needed. Converge as far as possible to reduce the need for on-line discussion.

Ph2: Treat [R2-2202462](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202462.zip) and [R2-2202463](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202463.zip), collect comments revise accordingly and endorse.

Intended outcome: Ph2: Endorsed CRs for merge

Deadline: Ph2: EOM

* [AT117-e][065][MGE] RRC (MediaTek)

Scope: Treat [R2-2202877](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202877.zip). Determine agreeable parts, points for discussion, open issues if needed. Can also open for comments on RRC CR. Take into account LS in’s. Converge offline if possible.

Intended outcome: Report, CR solutions, Agreed RRC CR (after short Post)

Deadline: If needed,on-line CB W2 Thursday, otherwise EOM or Short Post

ADDED W1 Tuesday

* [AT117-e][003][eIAB] Open Issues (Qualcomm)

Scope: Based on [R2-2202329](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202329.zip), progress remaining proposals. Determine agreeable parts, points for discussion if needed, open issues if needed. Aim for offline agreement, if not possible then pave the way for efficient on-line.

Intended outcome: Report

Deadline: In time for on-line CB W2 Wednesday

* [AT117-e][021][eIAB] BAP (Huawei)

Scope: Based on [R2-2203527](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203527.zip), progress remaining proposals. Treat also [R2-2202373](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202373.zip). Determine agreeable parts, points for discussion if needed, open issues if needed. Aim for offline agreement, if not possible then pave the way for efficient on-line. This discussion will continue as post meeting discussion for BAP CR, and updated BAP CR (taking into acc this meetings agreements) can also be reviewed as part of this discussion.

Intended outcome: Report (assume that CR revision is not needed for CB).

Deadline: In time for on-line CB W2 Wednesday

* [AT117-e][014][eIAB] MAC (Samsung)

Scope: Wait for RAN1 LS, kick off discussion when received. Based RAN1 LS and [R2-2203278](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203278.zip), progress remaining proposals (on MAC CEs). Determine agreeable parts, points for discussion if needed, open issues if needed. Aim for offline agreement, if not possible then pave the way for efficient on-line. This discussion will continue as post meeting discussion for MAC CR, and updated MAC CR (taking into acc this meetings agreements) can also be reviewed as part of this discussion.

Intended outcome: Report (assume that CR revision is not needed for CB).

Deadline: In time for on-line CB W2 Wednesday

* [AT117-e][022][eIAB] UE capabilities (Intel)

Scope: Treat [R2-2203702](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203702.zip). Determine agreeable parts, points for discussion if needed, open issues if needed. Aim for offline agreement, if not possible then pave the way for efficient on-line. Review Updated draft CRs for UE capabilities (pl provide), including agreements from prev. meeting, and all agreeable points from this meeting (e.g. this discussion and the open issues discussion).

Intended outcome: Report, Draft CRs (38306, 38331) endorsed.

Deadline: In time for on-line CB W2 Wednesday (Report) if CB is needed or W2 Thursday (CRs) if needed

**[012]** and **[015]** were modified/corrected, see above

ADDED W1 Wed

* [AT117-e][004][ePowSav] PEI and paging subgrouping (MediaTek)

Scope:

Following the on-line discussion on [R2-2202769](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202769.zip):

a) clarify details on UE behaviour for PEI in last cell, e.g. UE storing last cell info etc, and related TS impacts (can ask input on what need to be clarified).

b) whether we can assume that PEI with no subgrouping is implemented by using PEI + UEID subgrouping with one subgroup, or whether also other variants should be supported.

Treat [R2-2203720](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203720.zip) (taking into account on-line agreements).

Determine agreeable points, points for discussion if needed

Intended outcome: Report.

Deadline: In time for CB online W2 Tuesday

* [AT117-e][005][ePowSav] TRS / CSI-RS Open Issues (CATT)

Scope: Progress the discussion on Using TRS / CSI RS with eDRX, e.g. a) Clarify necessary restrictions assumptions for how this can work assuming no specific modifications, b) Consider if and how to handle situation when such restrictions assumptions seems unreasonable (are there such situations?), e.g. if to exclude eDRX UEs (and how), whether some simple enhancement can improve the situation.

Intended outcome: Report

Deadline: In time for CB online W2 Tuesday

* [AT117-e][006][ePowSav] RLM BFD relaxation (vivo)

Scope: Continue with Detailed aspects taking into account LS in, specify configuration etc, and whether a Reply LS is needed, see e.g. [R2-2202306](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202306.zip). Aim to agree offline, CB only if needed.

Intended outcome: Report, TPs (if applicable), Approved Reply LS (if applicable)

Deadline: W2 Tuesday (offline only)

* [AT117-e][024][ePowSav] PDCCH skip (Samsung)

Scope: Treat [R2-2203708](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203708.zip). Determine agreeable points, points for discussion if needed

Intended outcome: Report

Deadline: In time for CB online W2 Tuesday

* [AT117-e][016][feMIMO] MAC (Samsung)

Scope: Take into account on-line. Make further progress based on non-resolved parts of [R2-2203709](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203709.zip). Take into account new LS from RAN1 when/if it becomes available, to the extent reasonable. Update MAC CR. (This discussion will also continue as a post discussion for the CR). Determine agreeable parts, identify discussion points if any.

Intended outcome: Report, revised MAC CR (CR might not be needed for CB).

Deadline: In time for online CB W2 Wednesday

**[009]** and **[063]** were modified, see above

ADDED W1 Thursday

* [AT117-e][065][MBS] LS on SIB reception for receiving Bcast on Scell (Huawei)

Deadline: CB W1 Friday

CLOSED

ADDED W1 Friday

* [AT117-e][002][MBS] UP Open Issues (Samsung)

Scope: Based on [R2-2202685](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202685.zip), Continuation including both UP and RRC aspects.

- Continue discussion on the Mcast MAC reset (when to trigger it, detailed modifications to behaviour if neded), confirm that it is needed.

- RRC indication to enable/disable C-RNTI based PTM retransmission can be discussed further (baseline no indication/configuration)

Intended outcome: Report

Deadline: For online CB W2 Wednesday

* [AT117-e][066][MBS] Reply LS on MBS Service Area Identity and start procedure for broadcast service (CATT)

Intended outcome: Approved LS out (offline only no CB)

Deadline: VERY SHORT W2 Tuesday 0900 UTC

* [AT117-e][067][MBS] Reply LS on NR RRC to support split NR-RAN architecture for NR MBS (Nokia)

Intended outcome: Approved LS out (offline only no CB)

Deadline: VERY SHORT W2 Tuesday 0900 UTC

**[043]** was Modified, pl see above.

ADDED W2 Monday

* [AT117-e][068][QoE] LS in and LS out (Huawei)

Scope: Take into account LS ins, Suggest impact to TSes (on a high level, details for TS-specific discussions), determine discussion points for online CB if needed, make Reply LSes to the extent needed. Include also LS out(s) as identified by R2 117-e online discussions.

Intended outcome: Report, Approved LS out(s)

Deadline: EOM (preferably offline only)

* [AT117-e][069][QoE] UE capabilities CRs (CMCC)

Scope: Reflect progress including R2 117-e. CR endorsement

Intended outcome: Endorsed UE cap CRs (38331 and 38306) for Merge.

Deadline: EOM (offline)

* [Post117-e][070][QoE] 38300 CR (China Unicom)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed Stage-2 CR

Deadline: Short Post

* [Post117-e][071][eNPN] 38300 38331 CRs (Nokia)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CRs

Deadline: Short Post

* [Post117-e][072][eNPN] 38304 CRs (Qualcomm)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [AT117-e][073][eNPN] UE capabilities CRs (Intel)

Scope: Reflect progress including R2 117-e. CR endorsement

Intended outcome: Endorsed CR(s) for merge

Deadline: EOM (offline)

* [AT117-e][074][TEI17] EPS Fallback (Huawei)

Scope: Related to [R2-2202818](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202818.zip), [R2-2202505](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202505.zip), [R2-2202791](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202791.zip). Whether to have a EPS fallback enhancement where the UE goes directly to EUTRA for conn establishment upon paging in NR (MT), or NAS indication in the UE (MO). Determine and clarify the potential impact to other groups and security implications for MT and MO cases, aiming to understand whether the scope for this proposal can be kept limited to RAN2. If possible, determine if LS is needed to SA3.

Intended outcome: Report, agreeable LS to SA3 if applicable.

Deadline: For on-line CB W2 Thursday

* [AT117-e][075][MBS] UE Capability CRs (MediaTek)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Endorsed Draft CRs For merge 38306 38331

Deadline: EOM (offline)

* [Post117-e][076][MBS] 38300 CR (CMCC)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][077][MBS] 38331 CR (Huawei)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][078][MBS] 38304 CR (CATT)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][079][MBS] 38321 CR (OPPO)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][080][MBS] 38322 CR (vivo)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][081][MBS] 38323 CR (Xiaomi)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][082][MBS] 37324 CR (Samsung)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

**[039], [051]** were Modified, pl see above.

ADDED W2 Tuesday

* [Post117-e][083][ePowSav] LS on RLM BFD relaxation (vivo)

Scope: Offline to send LS for Info to R4 on R2 progress of RLM BFD relxation, can discuss if it should be a reply LS.

Intended outcome: Approved LS out

Deadline: Short Post

* [AT117-e][084][ePowSav] UE capabilities (Intel)

Scope: Reflect progress including R2 117-e. CR Endorsement

Intended outcome: Endorsed CRs or draft CRs for Merge

Deadline: EOM (if possible)

* [Post117-e][085][ePowSav] 38331 CR (CATT)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][086][ePowSav] 38304 CR (vivo)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][087][ePowSav] 38300 CR (Huawei)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][088][IoT-NTN] 36.331 CR (Huawei)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][089][IoT-NTN] 36.304 CR (Ericsson)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][090][IoT-NTN] 36.321 CR (MediaTek)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][091][IoT-NTN] 36.300 CR (Ericsson)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][092][IoT-NTN] 36.306 CR (Nokia)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [AT117-e][093][IoT-NTN] Open Issues Reply LS (Nokia)

Scope: Reply LS to RAN3

Intended outcome: Approved LS out

Deadline: EOM (offline only)

**[011], [012], [020], [065]** were Modified, pl see above.

ADDED W2 Wednesday

* [Post117-e][014][eIAB] 38321 CR (Samsung)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][021][eIAB] 38340 CR (Huawei)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][094][eIAB] 38300 CR (Qualcomm)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][095][eIAB] 38331 CR (Ericsson)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][096][eIAB] 37340 CR (vivo)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][097][eIAB] UE capabilties (Intel)

Scope: Reflect progress including R2 117-e. CR endorsement

Intended outcome: Endorsed CRs for merge (306 and 331)

Deadline: Extra Short

* [Post117-e][098][feMIMO] 38300 CR (Samsung)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][009][feMIMO] 38331 CR (Ericsson)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][016][feMIMO] 38321 CR (Samsung)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][037][R17] ASN.1 review (Ericsson, Samsung)

Scope: Discuss further the details, based on rapporteurs initiative, can e.g. discuss remaining aspects in [R2-2203417](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203417.zip) and R2-2200260.

Intended outcome: Enhanced ASN.1 review process, Detailed plan.

Deadline: Short Post

* [Post117-e][099][NR15NR16] RRC Misc Corrections (Ericsson)

Scope: CR approval RRC Rapporteur CR for Rel-16 (and Rel-15 if needed).

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][038][NR17] UE caps Main (Intel)

Scope: Progress UE capabilities following the plan in [R2-2202662](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202662.zip),

Intended outcome: Rel-17 NR UE Cap Mega CRs 38306 38331

Deadline: Short Post

* [Post117-e][068][QoE] LS outs (Huawei)

Scope: Continue [AT117-e][068][QoE], progress can check the LS outs

Intended outcome: Approved LS out(s)

Deadline: Short Post

* [Post17-e][045][QoE] RRC CR (Ericsson)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][058][NR17] FR2 UL Gap CRs (Apple)

Scope: Reflect progress including R2 117-e. Take into account late LS from RAN4. CR approval

Intended outcome: Agreed CRs

Deadline: Short Post

* [Post117-e][074][TEI17] EPS Fallback (Huawei)

Scope: Related to [AT117-e][074][TEI17], on Whether to have a EPS fallback enhancement where the UE goes directly to EUTRA for conn establishment upon paging in NR (MT), or NAS indication in the UE (MO). In order to determine whether the scope for these proposal(s) can be kept limited to RAN2 and the solution acceptable, send an LS to SA2 SA3 CT1. The LS should be sufficiently concrete to not generate a lot of work in the receiving groups.

Intended outcome: Approved LS out

Deadline: Short Post

# 1 Opening of the meeting

**This e-Meeting**

- This e-Meeting follows 3GPP principles for e-Meetings.

- RAN2 117 electronic has full decision power, i.e. full decision power to make agreements and approvals according to RAN WG2 terms of reference, without any need to ratify decisions at a later RAN2 or other meeting. .

## 1.1 Call for IPR

|  |
| --- |
| The attention of the delegates of this Working Group is drawn to the fact that **3GPP Individual Members have the obligation** under the IPR Policies of their respective Organizational Partners **to inform their respective Organizational Partners of Essential IPRs** they become aware of.  The delegates were asked to take note that they were hereby invited:   * to investigate whether their organization or any other organization owns IPRs which were, or were likely to become Essential in respect of the work of 3GPP. * to notify their respective Organizational Partners of all potential IPRs, e.g., for ETSI, by means of the IPR Statement and the Licensing declaration forms (https://www.etsi.org/images/files/IPR/etsi-ipr-form.doc) |

NOTE: IPRs may be declared to the Director-General or Chairman of the SDO, but not to the RAN WG2 Chairman.

## 1.2 Network usage conditions

1/ To avoid email system overload, please don’t attach files and documents to emails e.g. for offline email discussions, but instead use files placed on the ftp server instead. Inbox/Drafts folder is used for AT-meeting offline discussions.

## 1.3 Other

|  |
| --- |
| In accordance with the Working Procedures it is reaffirmed that:  (i) compliance with all applicable antitrust and competition laws is required;  (ii) timely submissions of work items in advance of TSG or WG meetings are important to allow for full and fair consideration of such matters; and  (iii) the chairman will conduct the meeting with strict impartiality and in the interests of 3GPP |

Note on (i): In case of question please contact your legal counsel.

Note on (ii): WIDs don’t need to be submitted to the RAN2 meeting and will typically not be discussed here either.

# 2 General

## 2.1 Approval of the agenda

[R2-2202101](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202101.zip) Agenda for RAN2#117-e Chairman agenda

## 2.2 Approval of the report of the previous meeting

[R2-2202102](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202102.zip) RAN2#116bis-e Meeting Report MCC report

## 2.3 Reporting from other meetings

## 2.4 Others

[R2-2202103](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202103.zip) RAN2 Handbook 02-22 MCC discussion

Instructions – UE capabilites

There is no specific coordination for EUTRA UE capabilities. WI specific CRs shall be developed.

For Rel17 NR UE capabilities the following applies:

1: Aim to Work on mega CRs (one mega CR for TS 38.306 and one for TS 38.331). This work is done under Agenda Item AI 8.0.2

2: Coordinate centrally incorporation in CRs of RAN1 / RAN4 features for all Rel17 WIs. This work is done under Agenda Item AI 8.0.2 and changes are done directly to the mega CRs. There could be exceptions, case by case, where RAN1 / RAN4 features are treated under a WI-specific Agenda Item instead.

3: RAN2 should only implement in the CRs the features / feature groups from the RAN1 and RAN4 feature list without any FFS (no highlighted yellow, [] and/or marked as FFS/TBD). Also UE Capabilities that are dependent on such FFS features should not be implemented.

4: R2 Features and capabilities developed only in R2, are developed individually per WI, under WI-specific Agenda Items. Draft CRs (running CRs) for 38.331 and 38.306 are produced. The 306 CRs shall include an annex containing the RAN2 determined UE capabilities in the feature list format (similar to annex containing RAN2 agreements) for easy compilation into the TR38.822 in the later stage.

5. At the end of R2 117 (Feb meeting), endorsed WI specific UE capability CRs will be merged into the mega CRs, and the mega CRs will be provided to TSG RAN. Any exception to this need to be decided case by case.

Tdoc Limitations

RAN2#117-e focuses on closing of Rel-17. A common tdoc limitation has been imposed on AI5 + AI6. It is expected that companies will need to prioritize.

Tdoc limitations – instructions (reminder)

Tdoc limitations doesn’t apply to Rapporteur Input, i.e.

- Assigned summary rapporteur input of the summary.

- Email / offline discussions outcomes by discussion rapporteur,

- WI rapporteurs input for WI planning etc,

- TS rapporteur input for TS maintenance

- Assigned Editor of Running CRs input to update the running CR and input of one tdoc to facilitate addressing of CR open issues.

- Contact Company of a LSin that triggers RAN2 action may submit one tdoc to facilitate the LS reply. This only applies to one of the contact companies in case there are several (default the first).

Tdoc limitations doesn’t apply to Input created at the meeting, revisions, assigned documents etc.

Tdoc limitations doesn’t apply to shadow / mirror CRs (Cat A).

Tdoc limitations applies to all other submitted tdocs.

# 3 Incoming liaisons

Note: LSs are moved to the respective agenda items if any.

Rel-18 LSin’s will not be treated at current meeting. Rel-18 LSin’s will be treated in Q3. In case some LS is particularly urgent and treatment is not complex, it could be considered for Q2.

[R2-2202181](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202181.zip) Reply LS on energy efficiency as guiding principle for new solutions (S5-221501; contact: Orange) SA5 LS in Rel-18 To:SA Cc:RAN, CT, SA1, SA2, SA3, SA4, SA6, RAN1, RAN2, RAN3, RAN4, RAN5, CT1, CT3, CT4, CT6

Chair Comment: RAN2 is just CCed, no action, don’t see a reason to postpone to open again later

* [000] Noted

Late LSes

[R2-2203718](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203718.zip) LS response to 3GPP RAN on Location Services for Drones (LI(21)P59034r1; contact: ETSI TC LI) ETSI TC LI LS in To:RAN, RAN2 Cc:SA3-LI

Chair: can leave untreated for now, maybe plenary will reply

[R2-2204066](C:\\Users\\mtk65284\\Documents\\3GPP\\tsg_ran\\WG2_RL2\\TSGR2_117-e\\Docs\\R2-2204066.zip" \o "C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204066.zip) LS on the SDU type used over user plane for NR PC5 reference point (C1-221835; contact: ZTE) CT1 LS in Rel-17 5G\_ProSe To:RAN2 Cc:SA2

Chair: postponed to next meeting

[R2-2204101](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204101.zip) LS On Canada band n77 (R4-2206568; contact: Telus) RAN4 LS in Rel-17 To:RAN2 Cc:RAN

Chair: postponed to next meeting

# 4 EUTRA corrections Rel-15 and earlier

Only essential corrections. No documents should be submitted to 4. Please submit to 4.x

[R2-2203295](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203295.zip) Clarification of RSRP measurement triggering for number of cells for UAVs Ericsson CR Rel-15 36.331 15.16.0 4772 - F NR\_UAV-Core

[R2-2203297](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203297.zip) Clarification of RSRP measurement triggering for number of cells for UAVs Ericsson CR Rel-16 36.331 16.7.0 4773 - A NR\_UAV-Core

[R2-2203930](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203930.zip) LS on RAN feedback for low latency (S2-2201767; contact: Huawei) SA2 LS in Rel-18 FS\_5TRS\_URLLC To:RAN2 Cc:RAN1, RAN3

[R2-2203931](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203931.zip) LS on QoS support with PDU Set granularity (S2-2201803; contact: Intel) SA2 LS in Rel-18 FS\_XRM To:SA4 Cc:RAN1, RAN2, RAN3

## 4.1 NB-IoT corrections Rel-15 and earlier

Documents in this agenda item will be handled in a break out session. Common NB-IoT/eMTC parts treated jointly with 4.2.

[R2-2203214](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203214.zip) Correction to DRX active time after a Scheduling Request or a SPS BSR has been sent in NB-IoT Huawei, HiSilicon CR Rel-15 36.321 15.11.0 1528 - F NB\_IOTenh2-Core

[R2-2203215](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203215.zip) Correction to DRX active time after a Scheduling Request or a SPS BSR has been sent in NB-IoT Huawei, HiSilicon CR Rel-16 36.321 16.6.0 1529 - A NB\_IOTenh2-Core

[R2-2203480](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203480.zip) Discussion on enabling 2 HARQ processes and HARQ RTT timer in NB-IoT Ericsson discussion NB\_IOTenh-Core

[R2-2203486](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203486.zip) Clarification on CDRX and two HARQ interaction for NB-IoT Ericsson CR Rel-14 36.321 14.13.0 1530 - F NB\_IOTenh-Core

[R2-2203495](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203495.zip) Clarification on CDRX and two HARQ interaction for NB-IoT Ericsson CR Rel-15 36.321 15.11.0 1531 - A NB\_IOTenh-Core

[R2-2203496](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203496.zip) Clarification on CDRX and two HARQ interaction for NB-IoT Ericsson CR Rel-16 36.321 16.6.0 1532 - A NB\_IOTenh-Core

## 4.2 eMTC corrections Rel-15 and earlier

Documents in this agenda item will be handled in a break out session. Common NB-IoT/eMTC parts treated jointly with 4.1.

## 4.3 V2X and Sidelink corrections Rel-15 and earlier

Documents in this agenda item will be handled in a break out session.

## 4.4 Positioning corrections Rel-15 and earlier

Documents in this agenda item will be handled by email. No web conference is planned for this agenda item.

## 4.5 Other LTE corrections Rel-15 and earlier

Documents in this agenda item will be handled in a break out session.

Purely editorial corrections should be avoided, text enhancements may be deprioritized. Corrections should be taken up with the specification editor before submitting to avoid CR duplication. If this is not done, the contribution may not be treated.

[R2-2202218](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202218.zip) Dummify empty sequence in FlightPathInfoReport-r15 and other corrections Lenovo, Motorola Mobility CR Rel-15 36.331 15.16.0 4753 - F LTE\_Aerial-Core, TEI15

[R2-2202219](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202219.zip) Dummify empty sequence in FlightPathInfoReport-r15 and other corrections Lenovo, Motorola Mobility CR Rel-16 36.331 16.7.0 4754 - A LTE\_Aerial-Core, TEI16

[R2-2203238](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203238.zip) Discussion on handling QoE configuration in full configuration Google Inc. discussion Rel-15 36.331 LTE\_QMC\_Streaming-Core R2-2201532

# 5 Rel-15 WI: New Radio (NR) Access Technology

(NR\_newRAT-Core; leading WG: RAN1; REL-15; started: Mar. 17; closed: Jun. 19: WID: RP-191971)

Only essential corrections. Please submit CRs marked “NR\_newRAT-Core, TEI16” under one of the below clauses.

Tdoc limitation: AI5 + AI6: 14

## 5.1 Organisational

Incoming LSs, etc.

[R2-2204073](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204073.zip) Reply LS on configuration of p-MaxEUTRA and p-NR-FR1 (R1-2202769; contact: Huawei) RAN1 LS in Rel-15 NR\_newRAT-Core To:RAN5 Cc:RAN2, RAN4

## 5.2 Stage 2 corrections

Includes corrections to TS 38.300 and TS 37.340. You should discuss your stage 2 CRs with the specification rapporteurs before submission.

## 5.3 User Plane corrections

* [AT117-e][025][NR15] User-plane Corrections (Huawei)

Scope: Treat [R2-2202109](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202109.zip), [R2-2203129](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203129.zip), [R2-2203130](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203130.zip), [R2-2203241](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203241.zip), [R2-2203242](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203242.zip), [R2-2203240](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203240.zip), [R2-2202552](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202552.zip), [R2-2202553](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202553.zip), [R2-2203239](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203239.zip), [R2-2202194](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202194.zip). Ph1 Determine agreeable parts. P2 agree CRs for agreeable parts.

Intended outcome: Report, Agreed CRs.

Deadline: Schedule 1

[R2-2204007](C:\\Users\\mtk65284\\Documents\\3GPP\\tsg_ran\\WG2_RL2\\TSGR2_117-e\\Docs\\R2-2204007.zip" \o "C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204007.zip) Report of [AT117-e][025][NR15] User-plane Corrections Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

* [025] Noted, agreements reflected below

### 5.3.1 MAC

Initial state

[R2-2202109](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202109.zip) Reply LS on initial state of elements controlled by MAC CEs (R1-2112860, Contact: Huawei) LS in Rel-15 To:RAN2 Cc:RAN4

* [025] Noted

[R2-2203129](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203129.zip) Clarification on the initial state of elements controlled by MAC CE (based on LS R1-2112860, Contact: Huawei) Huawei, HiSilicon CR Rel-15 38.321 15.12.0 1208 - F NR\_newRAT-Core, TEI16

=> Revised in [R2-2203824](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203824.zip)

[R2-2203824](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203824.zip) Clarification on the initial state of elements controlled by MAC CE (based on LS R1-2112860, Contact: Huawei) Huawei, HiSilicon CR Rel-15 38.321 15.12.0 1208 1 F NR\_newRAT-Core, TEI16

* [025] Agreed

[R2-2203130](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203130.zip) Clarification on the initial state of elements controlled by MAC CE (based on LS R1-2112860, Contact: Huawei) Huawei, HiSilicon CR Rel-16 38.321 16.7.0 1209 - F NR\_newRAT-Core, TEI16

=> Revised in [R2-2203825](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203825.zip)

[R2-2203825](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203825.zip) Clarification on the initial state of elements controlled by MAC CE (based on LS R1-2112860, Contact: Huawei) Huawei, HiSilicon CR Rel-16 38.321 16.7.0 1209 1 F NR\_newRAT-Core, TEI16

* [025] Agreed

[R2-2203242](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203242.zip) Discussion on Initial State of Elements Controled by MAC CEs ZTE Corporation,Sanechips discussion Rel-15 NR\_newRAT-Core

* [025] Noted

[R2-2203241](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203241.zip) Correction to 38.321 on the term of the handover in handling of MAC CE ZTE Corporation,Sanechips CR Rel-16 38.321 16.7.0 1212 - F NR\_newRAT-Core

* [025] Merged with CR in R2-2203130

[R2-2203240](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203240.zip) Correction to 38.321 on the term of the handover in handling of MAC CE ZTE Corporation,Sanechips CR Rel-15 38.321 15.12.0 1211 - F NR\_newRAT-Core

* [025] Merged with CR in R2-2203129

Others

[R2-2202552](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202552.zip) Clarification on the DRX RTT Timer operation with UL skipping configuration Apple CR Rel-15 38.321 15.12.0 1195 - F NR\_newRAT-Core

[R2-2202553](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202553.zip) Clarification on the DRX RTT Timer operation with UL skipping configuration Apple CR Rel-16 38.321 16.7.0 1196 - A NR\_newRAT-Core

* [025] both not pursued
* [025] RAN2 confirms that the UE shall not start the *drx-HARQ-RTT-TimerUL* for the corresponding HARQ process if the corresponding PUSCH transmission is skipped.

[R2-2203239](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203239.zip) Discussion on An Abnormal Case for Retransmission ZTE Corporation,OPPO, Sanechips discussion Rel-15 NR\_newRAT-Core

* [025] Noted No change to the specification is needed for the issue in R2-2203239.

### 5.3.2 RLC PDCP SDAP

[R2-2202194](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202194.zip) Discussion on handling of discardOnPDCP OPPO discussion Rel-15 NR\_newRAT-Core

* [025] Observation 1: NR Rel-15 PDCP specification mandates that *discardOnPDCP* is applied to both UE RX side and Tx side, but there seems different understandings on whether *discardOnPDCP* is applied to UE RX side for Rel-15.
* [025] Observation 2: There is significant support that there are no stored PDCP PDUs in the UE’s RX PDCP buffer for SRBs when receiving *discardOnPDCP* indication for NR Rel-15.
* [025] RAN2 understands that in case there is stored PDCP PDUs in the UE RX PDCP buffer for SRBs when receiving *discardOnPDCP* indication, no change to specification is needed for NR Rel-15 and 16. The UE is not mandated to handle the SN gap from the specification but it can be up to implementation to avoid UE RX window to get stuck.

## 5.4 Control Plane corrections

### 5.4.1 NR RRC

Includes NR RRC and Changes that are applied to both NR RRC and LTE RRC, except UE capabilities.

NAS procedures not subject to UAC

Offline, CB online W2 if needed

* [AT117-e][026][NR15] NAS procedure not subject to UAC (Apple)

Scope: Treat [R2-2202104](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202104.zip), [R2-2202535](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202535.zip), [R2-2202536](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202536.zip), [R2-2202537](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202537.zip), [R2-2202538](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202538.zip), [R2-2203487](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203487.zip). Ph1 Determine agreeable parts, Ph2 For agreeable parts, progress CRs, and reply LS out.

Intended outcome: Report, Agreed CRs, Approved LS out.

Deadline: Schedule 1

[R2-2203861](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203861.zip) Summary of [AT117-e][026][NR15] NAS procedure not subject to UAC (Apple) Apple discussion Rel-15 NR\_SL\_relay-Core

* [026] Noted, agreements reflected below

[R2-2202104](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202104.zip) LS on NAS procedure not subject to UAC (C1-217227; contact: Apple) CT1 LS in Rel-15 To:RAN2

Moved from 5.1

* [026] Noted

[R2-2202535](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202535.zip) Discussion on RRC handling of NAS triggers not subject to UAC Apple discussion Rel-15 NR\_newRAT-Core

[R2-2203487](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203487.zip) Discussion on NAS-triggered resume procedure without UAC Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

* [026] Both Noted
* [026] RAN2 confirm that according to Rel-15 RRC specification, when T302 timer is running, UE will not block the RRC resume request triggered by NAS procedure(s) without AC/AI.
* [026] For Rel-15/Rel-16 RRC\_INACTIVE UE, when T302 timer is running, it is up to UE implementation to handle the resumption of RRC connection triggered by a NAS procedure which does not provide Access category/Access identity
* [026] RAN2 may discuss the matter further in Rel-17 or later.

[R2-2202536](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202536.zip) Correction on RRC resume of NAS triggers without access category Apple CR Rel-15 38.331 15.16.0 2895 - F NR\_newRAT-Core

[R2-2202537](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202537.zip) Correction on RRC resume of NAS triggers without access category Apple CR Rel-16 38.331 16.7.0 2896 - A NR\_newRAT-Core

* [026] Both Not Pursued

[R2-2202538](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202538.zip) [Draft] Reply LS on NAS procedure not subject to UAC Apple LS out NR\_newRAT-Core To:CT1

Not Treated

Power limitation in DC

Wait for Reply LSes from RAN1 and RAN4

[R2-2202173](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202173.zip) LS on configuration of p-MaxEUTRA and p-NR-FR1 (R5-217995; contact: Huawei) RAN5 LS in Rel-15 To:RAN1, RAN2, RAN4

Moved from 5.1

[R2-2203133](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203133.zip) Draft reply LS on configuration of p-MaxEUTRA and p-NR-FR1 Huawei, HiSilicon LS out Rel-15 NR\_newRAT-Core To:RAN5 Cc:RAN1, RAN4

Moved from 5.3.1

[R2-2202655](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202655.zip) Discussion on configuration of p-MaxEUTRA and p-NR-FR1 ZTE Corporation, Sanechips discussion Rel-15 NR\_newRAT-Core

[R2-2202656](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202656.zip) [Draft] Reply LS on configuration of p-MaxEUTRA and p-NR-FR1 ZTE Corporation, Sanechips LS out Rel-15 NR\_newRAT-Core To:RAN5 Cc:RAN1, RAN4

[R2-2202798](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202798.zip) Reply LS on configuration of p-MaxEUTRA and p-NR-FR1 vivo LS out Rel-15 NR\_newRAT-Core To:RAN5 Cc:RAN1, RAN4

Miscellaneous I

Offline

* [AT117-e][027][NR15] RRC misc I (Ericsson)

Scope: Treat [R2-2202106](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202106.zip), [R2-2202272](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202272.zip), [R2-2202273](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202273.zip), [R2-2202393](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202393.zip), [R2-2203498](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203498.zip), [R2-2203499](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203499.zip), [R2-2203335](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203335.zip), [R2-2203336](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203336.zip)

Ph1 Determine agreeable parts, Ph2 For agreeable parts, progress CRs.

Intended outcome: Report, Agreed CRs

Deadline: Schedule 1

[R2-2203774](C:\\Users\\mtk65284\\Documents\\3GPP\\tsg_ran\\WG2_RL2\\TSGR2_117-e\\Docs\\R2-2203774.zip" \o "C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203774.zip) [AT117-e][027][NR15] RRC misc I (Ericsson) Ericsson discussion Rel-15 NR\_newRAT-Core

* [027] Noted, agreements taken into account below

RMSI search space

[R2-2202106](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202106.zip) Reply LS on RMSI reception based on non-zero search space (R1-2112765; contact:OPPO) RAN1 LS in Rel-15 To:RAN2

Moved from 5.1

* [027] Noted

[R2-2202272](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202272.zip) Clarification of search space configuration for RMSI-R15 OPPO CR Rel-15 38.331 15.16.0 2884 - F NR\_newRAT-Core

[R2-2202273](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202273.zip) Clarification of search space configuration for RMSI-R16 OPPO CR Rel-16 38.331 16.7.0 2885 - A NR\_newRAT-Core

* [027] Both not pursued

Measurements and Gaps

[R2-2202393](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202393.zip) Clarification on per UE/per FR gap setup and release inconsistency Nokia, Nokia Shanghai Bell discussion Rel-15

* [027] Noted, proposals not agreed

[R2-2203498](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203498.zip) Clarification on servingCellMO (R15) Huawei, HiSilicon CR Rel-15 38.331 15.16.0 2962 - F NR\_newRAT-Core

[R2-2203499](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203499.zip) Clarification on servingCellMO (R16) Huawei, HiSilicon CR Rel-16 38.331 16.7.0 2963 - A NR\_newRAT-Core

* [027] Changes related to CSI-RS-Resource-Mobility in CR [R2-2203498](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203498.zip) and [R2-2203499](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203499.zip) are merged with the rapporteur’s CR.

[R2-2203335](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203335.zip) On rsType to be used for beam measurements Ericsson CR Rel-15 38.331 15.16.0 2947 - F NR\_newRAT-Core

[R2-2203336](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203336.zip) On rsType to be used for beam measurements Ericsson CR Rel-16 38.331 16.7.0 2948 - A NR\_newRAT-Core

* [027] Both not pursued

Miscellaneous II

Offline

* [AT117-e][028][NR15] RRC misc II (Intel)

Scope: Treat [R2-2202637](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202637.zip), [R2-2202638](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202638.zip), [R2-2202639](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202639.zip), [R2-2203327](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203327.zip), [R2-2203328](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203328.zip)

Ph1 Determine agreeable parts, Ph2 For agreeable parts, progress CRs

Intended outcome: Report, Agreed CRs.

Deadline: Schedule 1

R2-2204019 Report of [AT117-e][028][NR15] RRC misc II (Intel) Intel Corporation report Rel-15 NR\_newRAT-Core

* [028] Noted, agreements reflected below.

Security

[R2-2202637](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202637.zip) Issues with use of NCC for KgNB derivation during re-establishment and Resume procedure Intel Corporation discussion Rel-15 38.331 NR\_newRAT-Core

* [028] Noted

[R2-2202638](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202638.zip) Correction of NCC storage during re-establishment and Resume Intel Corporation CR Rel-15 38.331 15.16.0 2899 - F NR\_newRAT-Core

* [028] not pursued

[R2-2202639](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202639.zip) Correction of NCC storage during re-establishment and Resume Intel Corporation CR Rel-16 38.331 16.7.0 2900 - A NR\_newRAT-Core

=> Revised in R2-2204018

R2-2204018 Correction of NCC storage during re-establishment and Resume Intel Corporation CR Rel-16 38.331 16.7.0 2900 1 F NR\_newRAT-Core, TEI16

Full Configuration

[R2-2203327](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203327.zip) Correction on Full configuration ZTE Corporation, Sanechips CR Rel-15 38.331 15.16.0 2941 - F NR\_newRAT-Core

* [028] not pursued

[R2-2203328](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203328.zip) Correction on Full configuration(R16) ZTE Corporation, Sanechips CR Rel-16 38.331 16.7.0 2942 - A NR\_newRAT-Core

* [028] Merged, include the changes on reconfigWithSync proposed in CR R2-2203328 in an RRC rapporteur CR for Rel-16.

Inter-node Signalling

Offline

* [AT117-e][029][NR15] RRC Inter-Node Signalling (Nokia)

Scope: Treat [R2-2202121](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202121.zip), [R2-2203500](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203500.zip), [R2-2203501](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203501.zip), [R2-2202806](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202806.zip), [R2-2202807](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202807.zip), [R2-2202808](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202808.zip), [R2-2202123](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202123.zip), [R2-2203321](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203321.zip), [R2-2203322](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203322.zip). Ph1 Determine agreeable parts, Ph2 For agreeable parts, progress CRs, (reply LSes out only if needed).

Intended outcome: Report, Agreed CRs

Deadline: Schedule 1

R2-2203972 Offline [AT117-e][029][NR15] RRC Inter-Node Signalling (Nokia) Nokia (Rapporteur) discussion Rel-15 NR\_newRAT-Core

* [029] Noted, agreements reflected below

Inter-MN HO without SN change

[R2-2202121](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202121.zip) Reply LS on inter-MN handover without SN change (R3-216165; contact: Huawei) RAN3 LS in Rel-15 To:RAN2

Moved from 5.1

* [029] Noted

[R2-2203500](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203500.zip) Clarification on inter-MN handover without SN change (R15) Huawei, HiSilicon, Nokia, Nokia Shanghai Bell, Ericsson, ZTE Corporation, Samsung CR Rel-15 37.340 15.15.0 0299 - F NR\_newRAT-Core

=> Revised in [R2-2203936](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203936.zip)

[R2-2203936](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203936.zip) Clarification on inter-MN handover without SN change (R15) Huawei, HiSilicon, Nokia, Nokia Shanghai Bell, Ericsson, ZTE Corporation, Samsung, NEC CR Rel-15 37.340 15.15.0 0299 1 F NR\_newRAT-Core

* [029] agreed

[R2-2203501](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203501.zip) Clarification on inter-MN handover without SN change (R16) Huawei, HiSilicon, Nokia, Nokia Shanghai Bell, Ericsson, ZTE Corporation, Samsung CR Rel-16 37.340 16.8.0 0300 - A NR\_newRAT-Core

=> Revised in [R2-2203937](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203937.zip)

[R2-2203937](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203937.zip) Clarification on inter-MN handover without SN change (R16) Huawei, HiSilicon, Nokia, Nokia Shanghai Bell, Ericsson, ZTE Corporation, Samsung, NEC CR Rel-16 37.340 16.8.0 0300 1 A NR\_newRAT-Core

* [029] agreed

[R2-2202806](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202806.zip) Signalling in inter-MN HO without SN change NEC discussion Rel-15 NR\_newRAT-Core

* [029] Noted

[R2-2202807](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202807.zip) Clarification on inter-MN handover without SN change NEC CR Rel-15 38.331 15.16.0 2907 - F NR\_newRAT-Core

[R2-2202808](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202808.zip) Clarification on inter-MN handover without SN change NEC CR Rel-16 38.331 16.7.0 2908 - A NR\_newRAT-Core

* [029] Both Postponed

SN initiated release of SCG

[R2-2202123](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202123.zip) Reply LS on signalling SN initiated release of SCG (R3-216236; contact: Ericsson) RAN3 LS in Rel-15 To:RAN2

Moved from 5.1

* [029] Noted

[R2-2203320](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203320.zip) Clarification on SN initiated release of an SCG Ericsson, Nokia, Nokia Shanghai Bell CR Rel-15 38.331 15.16.0 2938 - F NR\_newRAT-Core

[R2-2203321](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203321.zip) Clarification on SN initiated release of an SCG Ericsson, Nokia, Nokia Shanghai Bell CR Rel-16 38.331 16.7.0 2939 - A NR\_newRAT-Core

* [029] both agreed

### 5.4.2 LTE changes

### 5.4.3 UE capabilities

Including impacts to 38.306 (and 36.306) and the associated impact to 38.331 (and 36,331).

### 5.4.4 Idle/inactive mode procedures

This agenda item addresses the idle and inactive behaviour specified in 38.304 or 36.304. Other aspects related to inactive (e.g. state transitions, out of coverage, etc) are covered under RRC agenda items (5.4.1)

## 5.5 Positioning corrections

Corrections to both the stage 2 and stage 3 aspects related to positioning. Stage 2 CRs shall be discussed with the specification rapporteur (Sven Fischer sfischer@qti.qualcomm.com) before submission. Stage 2 CRs not discussed with the specification rapporteur will not be treated.

Documents in this agenda item will be handled by email. No web conference is planned for this agenda item.

[R2-2202597](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202597.zip) Corretion on the object identifier of LPP ASN.1 for R15 Huawei, HiSilicon CR Rel-15 37.355 15.2.0 0328 - F NR\_newRAT-Core

[R2-2202598](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202598.zip) Corretion on the object identifier of LPP ASN.1 for R16 Huawei, HiSilicon CR Rel-16 37.355 16.7.0 0329 - A NR\_newRAT-Core

[R2-2202599](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202599.zip) Discussion on the object identifier of LPP ASN.1 Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

# 6 Rel-16 NR Work Items

Essential corrections only.

Tdoc Limitation: See common tdoc limitation with AI 5

## 6.1 Common

Includes the following WIs and input that doesn’t fit elsewhere.

(NR\_IAB-Core; leading WG: RAN2; REL-16; started: Dec 18; target Aug 20; WID: RP-200840)

(NR\_unlic-Core; leading WG: RAN1; REL-16; started: Dec 18; Closed June 20; WID: RP-192926).

(NR\_IIOT-Core; leading WG: RAN2; REL-16; started: Mar 19; Completed: Jun 20; WID: RP-200797)

(NR\_UE\_pow\_sav-Core; leading WG: RAN1; REL-16; started: Mar 19; Completed Jun 20; WID: RP-200494).

(NR\_2step\_RACH-Core; leading WG: RAN1; REL-16; started: Dec 18; Completed: June 20; WID: RP-200085).

(SRVCC\_NR\_to\_UMTS-Core; leading WG: RAN2; REL-16; started: Dec 18; Completed; Mar 20; WID: RP-190713)

(RACS-RAN-Core, leading WG: RAN2; REL-16; started: Mar 19; completed: Jun 20; WID: RP-191088)

(NG\_RAN\_PRN-Core; leading WG: RAN3; REL-16; started: Mar 19; completed: June 20; WID: RP-200122)

(NR\_eMIMO-Core, leading WG: RAN1; REL-16; started: Jun 18; target; Aug 20; WID: RP-200474;)

(NR\_CLI\_RIM; leading WG: RAN1; REL-16; started: Dec 18; Completed: Jun 20; WID: RP-191997;)

(NR\_L1enh\_URLLC-Core, leading WG: RAN1; REL-16; Completed: June 20; WID: RP-191584)

(LTE\_NR\_DC\_CA\_enh-Core; leading WG: RAN2; REL-16; started: Jun 18; Target Aug 20; WI RP-200791)

(NR\_Mob\_enh-Core; leading WG: RAN2; REL-16; started: Jun 18; Completed June 20; WID: RP-192277).

(NR\_HST, NR\_RRM\_enh-Core, NR\_RF\_FR1, NR\_RF\_FR2\_req\_enh, NR\_n66\_BW, LTE\_NR\_B41\_Bn41\_PC29dBm-Core, NR\_CSIRS\_L3meas,)

(NR TEI16).

LTE mob enh corrections that are common with NR mobility enhancements should be submitted to this AI 6.1.X. LTE-only corrections, see AI 7.

### 6.1.1 Organisational

Incoming LSs, etc.

Late LS ins

[R2-2203889](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203889.zip) Reply LS on NR-U channel information and procedures (R1-2202673; contact: Samsung) RAN1 LS in Rel-16 NR\_unlic-Core To:RAN3 Cc:RAN2

[R2-2203890](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203890.zip) Reply LS on UE capability for supporting single DCI transmission schemes for multi-TRP (R1-2202691; contact: Apple) RAN1 LS in Rel-16 NR\_eMIMO-Core To:RAN4 Cc:RAN2

[R2-2204072](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204072.zip) Reply LS on Intra UE Prioritization Scenario (R1-2202734; contact: vivo) RAN1 LS in Rel-16 NR\_IIOT-Core To:RAN2

* [000] All postponed

### 6.1.2 Stage 2 corrections

You should discuss your stage 2 CRs with the specification rapporteurs before submission. Includes impact to 38.300, 36.300, 37.340

### 6.1.3 User Plane corrections

* [AT117-e][030][NR16] User-plane Related Corrections (vivo)

Scope: Treat [R2-2202524](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202524.zip), [R2-2202110](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202110.zip), [R2-2202326](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202326.zip) (RRC CR), [R2-2203484](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203484.zip), [R2-2203131](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203131.zip).

Ph1 Determine agreeable parts. P2 agree CRs for agreeable parts.

Intended outcome: Report, Agreed CRs.

Deadline: Schedule 1

R2-2204077 Report of [AT117-e][030][NR16] User-plane Related Corrections vivo discussion Rel-16 NR\_IIOT-Core

* [030] Noted, agreements reflected below

#### 6.1.3.1 MAC

UL skip

[R2-2202524](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202524.zip) Procedure level alignment of UL skipping Apple CR Rel-16 38.321 16.7.0 1192 - D NR\_IIOT-Core

* [030] Postponed, can be merged with next rapporteur CR for 38321

[R2-2202110](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202110.zip) Reply LS on UL skipping with LCH prioritization (R1-2112862; contact: vivo) RAN1 LS in Rel-16 To:RAN2

Moved Here

* [030] Noted

[R2-2202326](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202326.zip) Correction on UL skipping with LCH Prioritization in Rel-16 vivo CR Rel-16 38.331 16.7.0 2888 - F NR\_L1enh\_URLLC-Core, NR\_IIOT-Core

Moved Here. Better keep together with UP.

=> Revised in R2-2204078

R2-2204078 Correction on UL skipping with LCH Prioritization in Rel-16 vivo CR Rel-16 38.331 16.7.0 2888 1 F NR\_L1enh\_URLLC-Core, NR\_IIOT-Core

* [030] agreed

DRX with bundling

[R2-2203484](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203484.zip) Correction to DRX operation with bundling controlled in the DCI Ericsson, Nokia, T-Mobile USA, Verizon, Docomo discussion Rel-16 NR\_L1enh\_URLLC

* [030] Not agreed for Rel-16, can be discussed in TEI17.

#### 6.1.3.2 RLC

#### 6.1.3.3 PDCP

[R2-2203131](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203131.zip) Joint EHC and RoHC when Type is not present in Ethernet header Huawei, HiSilicon discussion Rel-16 NR\_IIOT-Core

* [030] Noted

#### 6.1.3.4 SDAP

#### 6.1.3.5 BAP

### 6.1.4 Control Plane corrections

#### 6.1.4.1 NR RRC

In case a correction need to mirrored for both NR RRC and LTE RRC, the corrections should be submitted under the same AI (i.e. the sub-AIs below this).

* [Post117-e][099][NR15NR16] RRC Misc Corrections (Ericsson)

Scope: CR approval RRC Rapporteur CR for Rel-16 (and Rel-15 if needed).

Intended outcome: Agreed CR

Deadline: Short Post

##### 6.1.4.1.1 Connection control

* [AT117-e][031][NR16] Connection Control I (Ericsson)

Scope: Treat [R2-2203408](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203408.zip), [R2-2202228](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202228.zip), [R2-2203410](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203410.zip), [R2-2203255](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203255.zip), [R2-2203132](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203132.zip), [R2-2202232](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202232.zip), [R2-2203438](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203438.zip). Ph1 Determine agreeable parts, Ph2 for agreeable parts, progress CRs.

Intended outcome: Report, Agreed CRs.

Deadline: Schedule 1

[R2-2203816](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203816.zip) [AT117-e][031][NR16] Connection Control I (Ericsson) Ericsson discussion Rel-16 NR\_newRAT-Core

* Revised

[R2-2204060](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204060.zip) [AT117-e][031][NR16] Connection Control I (Ericsson) Ericsson report Rel-16

* [031] Noted, agreements reflected below

Connection Control I

R15 newRAT

[R2-2203408](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203408.zip) Non-comprehended fields in ServingCellConfigCommon Ericsson CR Rel-16 38.331 16.7.0 2955 - F NR\_newRAT-Core, TEI16

Moved from 6.1.4

* [031] Not Pursued

[R2-2202228](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202228.zip) Handling of ServingCellConfigCommon Qualcomm Incorporated CR Rel-16 38.331 16.7.0 2880 - F TEI16

=> Revised in [R2-2203408](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203408.zip)

[R2-2204008](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204008.zip) Handling of ServingCellConfigCommon Qualcomm Incorporated CR Rel-16 38.331 16.7.0 2880 1 F TEI16

* [031] Agreed

[R2-2203410](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203410.zip) Clarification of commonSearchSpaceList Ericsson CR Rel-16 38.331 16.7.0 2957 - F NR\_newRAT-Core, TEI16

Moved from 6.1.4

* [031] not pursued
* [031] If the field commonSearchSpaceList is included in PDCCH-ConfigCommon it replaces any previously configured in this BWP’s PDCCH-ConfigCommon (but have no impact to other instances of the commonSearchSpaceList in other BWPs).

IAB

[R2-2203255](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203255.zip) Correction to RRC reconfiguration for IAB Google Inc. CR Rel-16 38.331 16.7.0 2874 1 F NR\_IAB-Core R2-2201540

* [031] Agreed

URLLC

[R2-2203132](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203132.zip) Correction on invalid symbol pattern Huawei, HiSilicon CR Rel-16 38.331 16.7.0 2929 - F NR\_L1enh\_URLLC-Core

=> Revised in [R2-2203826](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203826.zip)

[R2-2203826](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203826.zip) Correction on invalid symbol pattern Huawei, HiSilicon CR Rel-16 38.331 16.7.0 2929 1 F NR\_L1enh\_URLLC-Core

* [031] agreed

UE Pow sav

[R2-2202232](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202232.zip) Correction to the reference of DCI format 2\_6 field descriptions ROHDE & SCHWARZ CR Rel-16 38.331 16.7.0 2881 - F NR\_UE\_pow\_sav-Core

* [031] merged with 38331 rapporteur CR.

UE assistance Overheating

[R2-2203438](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203438.zip) Miscellaneous aspects on UAI Ericsson discussion

* [031] Noted
* [031] MRDC-AssistanceInfo can be used by MN to include overheatingAssistanceSCG-r16, even if the UE is not configured with IDC, by including affectedCarrierFreqCombInfoListMRDC with meaningless info e.g. setting interferenceDirectionMRDC to a spare value, and/or setting victimsytemtype without including any subfields, and/or setting affectedCarrierFreqCombMRDC without including any subfields.

[R2-2204061](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204061.zip) Correction on delta configuration for UAI overheating in EN-DC Ericsson CR Rel-16 36.331 16.7.0 4779 - F NR\_newRAT-Core

Not Treated

Connection Control II

* [AT117-e][032][NR1615] Connection Control II (Lenovo)

Scope: Treat [R2-2203407](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203407.zip) (or 3706), [R2-2203267](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203267.zip), [R2-2202835](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202835.zip), [R2-2202836](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202836.zip), [R2-2202872](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202872.zip), [R2-2202876](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202876.zip), [R2-2202222](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202222.zip), [R2-2202915](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202915.zip), [R2-2203477](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203477.zip), [R2-2202917](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202917.zip). Ph1 Determine agreeable parts, Ph2 for agreeable parts, progress CRs.

Intended outcome: Report, Agreed CRs.

Deadline: Schedule 1

[R2-2203909](C:\\Users\\mtk65284\\Documents\\3GPP\\tsg_ran\\WG2_RL2\\TSGR2_117-e\\Docs\\R2-2203909.zip" \o "C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203909.zip) Report of [AT117-e][032][NR1615] Connection Control II (Lenovo) Lenovo discussion Rel-16

* [032] Noted, agreements reflected below

NS value configuration

[R2-2203407](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203407.zip) NS\_55 in NR CA Ericsson discussion Rel-16 NR\_RF\_FR1-Core, TEI16

Moved from 6.1.4

* Revised

[R2-2203706](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203706.zip) NS\_55 in NR CA Ericsson discussion Rel-16 NR\_RF\_FR1-Core, TEI16

* [032] Noted.
* [032] The proposed solution for broadcasting NS\_55 in both C-band and DoD-band cells in R2-2203706 is not agreed. Can continue discussion at next meeting.

DC location reporting

[R2-2203267](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203267.zip) Clarification on meaning of dual PA in DC location reporting Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_RF\_FR1-Core

* [032] It is left to UE implementation whether a UE supporting *dualPA-Architecture* for a BC always reports two DC locations for the BC.
* [032] A UE not supporting dualPA-Architecture for a BC always reports one DC location for the BC. Whether to change the specification can be discussed at next meeting.

Conditional Configuration

[R2-2202835](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202835.zip) Correction on conditional reconfiguraiton execution for only one triggered cell Xiaomi, Samsung, NEC, Nokia, Nokia Shanghai Bell, LG Electronics, CATT, OPPO, Ericsson CR Rel-16 38.331 16.7.0 2911 - F NR\_Mob\_enh-Core

[R2-2202836](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202836.zip) Correction on conditional reconfiguraiton execution for only one triggered cell Xiaomi, Samsung, NEC, Nokia, Nokia Shanghai Bell, LG Electronics, CATT, OPPO, Ericsson CR Rel-16 36.331 16.7.0 4764 - F NR\_Mob\_enh-Core

* [032] Both agreed

[R2-2202872](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202872.zip) Conditional configuration handling upon going to RRC\_IDLE Lenovo, Motorola Mobility, Sharp CR Rel-16 38.331 16.7.0 2914 - F NR\_Mob\_enh-Core

[R2-2202876](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202876.zip) Conditional configuration handling upon going to RRC\_IDLE Lenovo, Motorola Mobility, Sharp CR Rel-16 36.331 16.7.0 4765 - F LTE\_feMob-Core

* [032] both not pursued

SRVCC to 3G

[R2-2202222](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202222.zip) Addition of missing description on mobility support for 5G SRVCC to 3G Lenovo, Motorola Mobility CR Rel-16 38.331 16.7.0 2879 - F SRVCC\_NR\_to\_UMTS-Core

=> Revised in [R2-2203906](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203906.zip)

[R2-2203906](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203906.zip) Addition of missing description on mobility support for 5G SRVCC to 3G Lenovo, Motorola Mobility CR Rel-16 38.331 16.7.0 2879 1 F SRVCC\_NR\_to\_UMTS-Core

* [032] agreed

NPN

[R2-2202915](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202915.zip) Correction on inclusion of selectedPLMN-Identity in RRCResumeComplete MediaTek Inc. CR Rel-16 38.331 16.7.0 2917 - F NG\_RAN\_PRN-Core, NR\_newRAT-Core

* [032] Agreed

HST

[R2-2203477](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203477.zip) Clarification on highSpeedConfig for HST Huawei, HiSilicon, CMCC CR Rel-16 38.331 16.7.0 2960 - F NR\_HST-Core

=> Revised in [R2-2203827](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203827.zip)

[R2-2203827](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203827.zip) Clarification on highSpeedConfig for HST Huawei, HiSilicon, CMCC CR Rel-16 38.331 16.7.0 2960 1 F NR\_HST-Core

=> Revised in [R2-2204057](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204057.zip)

[R2-2204057](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204057.zip) Clarification on highSpeedConfig for HST Huawei, HiSilicon, CMCC CR Rel-16 38.331 16.7.0 2960 2 F NR\_HST-Core

* [032] agreed

##### 6.1.4.1.2 RRM and Measurements

Need for Gap

[R2-2202917](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202917.zip) Clarification on target band filter in NeedForGap configuration MediaTek Inc. CR Rel-16 38.331 16.7.0 2918 - F NR\_newRAT-Core, TEI16

* [032] Not pursued
* [032] RAN2 understands that the network will request UE to report the gap requirement information only for the NR bands supported by UE.

##### 6.1.4.1.3 System Information and Paging

##### 6.1.4.1.4 Inter-Node RRC messages

##### 6.1.4.1.5 Other

* [AT117-e][033][NR1615] RRC Other (Samsung)

Scope: Treat [R2-2202296](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202296.zip), [R2-2202297](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202297.zip), [R2-2202298](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202298.zip), [R2-2202763](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202763.zip), [R2-2202990](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202990.zip), [R2-2202991](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202991.zip), [R2-2203439](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203439.zip), [R2-2203441](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203441.zip), [R2-2203442](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203442.zip). Ph1 Determine agreeable parts, Ph2 for agreeable parts, progress CRs.

Intended outcome: Report, Agreed CRs.

Deadline: Schedule 1

[R2-2203882](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203882.zip) Report of [AT117-e][033][NR1615] RRC Other (Samsung) Samsung discussion Rel-16 NR\_unlic-Core, RACS-RAN-Core, TEI16

* [033] Noted, agreements reflected below

RRC message Segmentation

[R2-2202296](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202296.zip) Discussion on RRC message segmentation Samsung discussion Rel-16

* [033] Noted

[R2-2202297](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202297.zip) Correction to RRC message segmentation Samsung CR Rel-16 38.331 16.7.0 2886 - F TEI16

[R2-2202298](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202298.zip) Correction to RRC message segmentation Samsung CR Rel-16 36.331 16.7.0 4757 - F TEI16

* [033] both not pursued

[R2-2202763](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202763.zip) Discussion on parallel transmission of segmented RRC messages Lenovo, Motorola Mobility discussion Rel-16 TEI16

* [033] Noted
* [033] Parallel transmission of segmented DL RRC messages is not supported in R16. This implies interleaving of segments of different RRC messages is ruled out.

[R2-2202990](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202990.zip) Correction on UL message segmentation Samsung CR Rel-16 38.331 16.7.0 2920 - F RACS-RAN-Core

[R2-2202991](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202991.zip) Correction on UL message segmentation Samsung CR Rel-16 36.331 16.7.0 4768 - F RACS-RAN-Core

* [033] both not pursued
* [033] Parallel transmission of segmented UL RRC messages is not supported in Rel-17.

[R2-2203439](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203439.zip) UL RRC segmentation capability Ericsson discussion

* [033] Noted
* [033] Discussion on UE support for the UL RRC segmentation in Msg5 is postponed to next meeting.

Terminology

[R2-2203441](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203441.zip) Correction on Non-numerical K1 Value vivo CR Rel-16 38.321 16.7.0 1216 - F NR\_unlic-Core

* [033] Merged with R2-2203825, see discussion [025]

[R2-2203442](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203442.zip) Correction on Non-numerical K1 Value vivo CR Rel-16 38.331 16.7.0 2959 - F NR\_unlic-Core

* [033] Merged with RRC rapporteur CR

#### 6.1.4.2 LTE changes

LTE-specific changes for these WIs. Changes that are applied to both LTE and NR shall be treated together under respective Agenda item other than this one.

#### 6.1.4.3 UE capabilities

* [AT117-e][034][NR16] UE capabilities I (Intel)

Scope: Treat [R2-2202146](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202146.zip), [R2-2202107](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202107.zip), [R2-2202665](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202665.zip), [R2-2203163](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203163.zip), [R2-2203167](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203167.zip), R2-22002195, [R2-2202196](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202196.zip), [R2-2203488](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203488.zip), [R2-2202293](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202293.zip). Ph1 Determine agreeable parts, Ph2 for agreeable parts, progress CRs.

Intended outcome: Report, Agreed CRs.

Deadline: Schedule 1

[R2-2204020](C:\\Users\\mtk65284\\Documents\\3GPP\\tsg_ran\\WG2_RL2\\TSGR2_117-e\\Docs\\R2-2204020.zip" \o "C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204020.zip) Summary report of [AT117-e][034][NR16] UE capabilities I (Intel) Intel Corporation discussion Rel-16

* [034] Noted, agreements reflected below

38.822

[R2-2202146](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202146.zip) LS on Rel-16 updated RAN4 UE features lists for LTE and NR (R4-2118536; contact: CMCC) RAN4 LS in Rel-16 To:RAN2 Cc:RAN1

Moved from 8.0.2

* [034] Noted

[R2-2202107](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202107.zip) LS on updated Rel-16 RAN1 UE features lists for NR after RAN1#107-e (R1-2112778; contact: NTT DOCOMO) RAN1 LS in Rel-16 To:RAN2 Cc:RAN4

Moved from 8.0.2

* [034] noted

[R2-2202665](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202665.zip) Miscellaneous updates on TR38.822 Intel Corporation CR Rel-16 38.822 16.2.0 0009 - F NR\_pos-Core, NR\_RF\_TxD-Core, NR\_unlic-Core, NR\_IAB-Core

Moved from 8.0.2

=> Revised in [R2-2203959](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203959.zip)

[R2-2203959](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203959.zip) Miscellaneous updates on TR38.822 Intel Corporation CR Rel-16 38.822 16.2.0 0009 1 F NR\_pos-Core, NR\_RF\_TxD-Core, NR\_unlic-Core, NR\_IAB-Core

* [034] agreed

Misc.

[R2-2203163](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203163.zip) Rename of field extendedBand-n77 Samsung R&D Institute UK CR Rel-16 38.306 16.7.0 0691 - D NR\_RF\_FR1-Core

* [034] Not Pursued

[R2-2203167](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203167.zip) Rename of field extendedBand-n77 Samsung R&D Institute UK CR Rel-16 38.331 16.7.0 2931 - D NR\_RF\_FR1-Core

* [034] not pursued

DAPS

[R2-2202195](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202195.zip) Left issues on DAPS capability OPPO discussion Rel-16 NR\_Mob\_enh-Core

[R2-2203488](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203488.zip) Discussion on DAPS capabilities and configuration Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

* [034] Both noted
* [034] Same or different FSPC IDs are allowed to be reported for a band with intra-frequency DAPS capability within DAPS FSC.
* [034] For inter-frequency DAPS HO cases where the BW of source and target cells are not overlapping with each other, the 1) BW-class, 2) frequency-separation and 3) BCS restriction reported in the same BC-entry are all applicable to DAPS FSC.
* [034] Confirm the following:

If the intraFreqDAPS-r16 is included and no sub-fields are included inside, it indicates support of intra-frequency syncDAPS handover.

If the interFreqDAPS-r16 is included and no sub-fields are included inside, it indicates support of inter-frequency syncDAPS handover.

* [034] Confirm that The terminology multi-DCI/single-DCI based multi-TRP refers to the following definitions:

Multi-DCI based multi-TRP: configured via the coresetPoolIndex-r16 IE in the ControlResourceSet IE

TDM/FDM based Single-DCI based multi-TRP: configured via the repetitionSchemeConfig-r16/repetitionSchemeConfig-v1630 IE in the PDSCH-Config IE

SDM based Single-DCI based multi-TRP: configured via the enhanced TCI States Activation/Deactivation for UE-specific PDSCH MAC CE, as specified in TS 38.321

[R2-2202293](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202293.zip) Correction on DAPS capability OPPO CR Rel-16 38.306 16.7.0 0677 - F NR\_Mob\_enh-Core

=> Revised in [R2-2203875](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203875.zip)

[R2-2203875](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203875.zip) Correction on DAPS capability OPPO CR Rel-16 38.306 16.7.0 0677 1 F NR\_Mob\_enh-Core

* [034] Agreed
* [AT117-e][035][NR1615] UE capabilities II (Huawei)

Scope: Treat [R2-2202810](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202810.zip), [R2-2202811](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202811.zip), [R2-2203268](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203268.zip), [R2-2203492](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203492.zip), [R2-2202229](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202229.zip), [R2-2202108](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202108.zip), [R2-2203510](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203510.zip), [R2-2203490](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203490.zip), [R2-2203491](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203491.zip), [R2-2203409](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203409.zip), [R2-2202525](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202525.zip), [R2-2202526](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202526.zip). Ph1 Determine agreeable parts, Ph2 for agreeable parts, progress CRs.

Intended outcome: Report, Agreed CRs.

Deadline: Schedule 1

[R2-2204053](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204053.zip) Summary of [AT117-e][035][NR1615] UE capabilities II Huawei, HiSilicon discussion

* [035] Noted, agreements reflected below

UL MIMO coherence for UL TX switching

[R2-2202810](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202810.zip) Adding UE capability of UL MIMO coherence for UL Tx switching Huawei, HiSilicon, China Telecom, Apple CR Rel-16 38.306 16.7.0 0635 2 F NR\_RF\_FR1-Core R2-2110483

=> Revised in [R2-2203984](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203984.zip)

[R2-2203984](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203984.zip) Adding UE capability of UL MIMO coherence for UL Tx switching Huawei, HiSilicon, China Telecom, Apple CR Rel-16 38.306 16.7.0 0635 3 F NR\_RF\_FR1-Core

* [035] agreed

[R2-2202811](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202811.zip) Adding UE capability of UL MIMO coherence for UL Tx switching Huawei, HiSilicon, China Telecom, Apple CR Rel-16 38.331 16.7.0 2786 2 F NR\_RF\_FR1-Core R2-2110484

=> Revised in [R2-2203985](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203985.zip)

[R2-2203985](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203985.zip) Adding UE capability of UL MIMO coherence for UL Tx switching Huawei, HiSilicon, China Telecom, Apple CR Rel-16 38.331 16.7.0 2786 3 F NR\_RF\_FR1-Core

* [035] agreed

**eMIMO**

[R2-2203268](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203268.zip) UE capabilities for UL full power modes Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_eMIMO-Core

* [035] Noted

[R2-2203492](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203492.zip) Correction on ssb-csirs-SINR-measurement-r16 capability Huawei, HiSilicon CR Rel-16 38.306 16.7.0 0695 - F NR\_eMIMO-Core

=> Revised in [R2-2204054](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204054.zip)

[R2-2204054](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204054.zip) Correction on ssb-csirs-SINR-measurement-r16 capability Huawei, HiSilicon CR Rel-16 38.306 16.7.0 0695 1 F NR\_eMIMO-Core

* [035] Agreed

BWP

[R2-2202229](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202229.zip) Discussion on BWP operation without bandwidth restriction Qualcomm Incorporated, ZTE Corporation discussion Rel-16 TEI16

* [035] Noted
* [035] Send a LS to RAN1/RAN4 describing the BWP operation issue without bandwidth restriction and ask RAN1/RAN4 provide their view. RAN2 continue to discuss this issue after getting inputs from RAN1/RAN4.

[R2-2204009](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204009.zip) LS on BWP operation without bandwidth restriction RAN2 LS out Rel-16 NR\_newRAT-Core, TEI16 To:RAN1, RAN4

* [035] LS out is approved

PDCCH Blind detection

[R2-2202108](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202108.zip) Reply LS on PDCCH Blind Detection in CA (R1-2112833; contact: Huawei) RAN1 LS in Rel-16 To:RAN2

Moved from 6.1.1

* [035] Noted

[R2-2203489](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203489.zip) Discussion on PDCCH Blind Detection in CA Huawei, HiSilicon discussion Rel-16 NR\_L1enh\_URLLC-Core

=> Revised in [R2-2203510](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203510.zip)

[R2-2203510](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203510.zip) Discussion on PDCCH Blind Detection in CA Huawei, HiSilicon discussion Rel-16 NR\_L1enh\_URLLC-Core [R2-2203489](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203489.zip) Late

* [035] Noted
* [035] Send a LS to RAN1 asking to clarify the intention and the backward compatibility for PDDCH blind detection capability in their LS NOTE2/3/4.

[R2-2203490](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203490.zip) Correction on PDCCH Blind Detection in CA Huawei, HiSilicon CR Rel-16 38.331 16.7.0 2961 - F NR\_L1enh\_URLLC-Core

[R2-2203491](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203491.zip) Correction on PDCCH Blind Detection in CA Huawei, HiSilicon CR Rel-16 38.306 16.7.0 0694 - F NR\_L1enh\_URLLC-Core

* [035] Both Postponed

[R2-2204055](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204055.zip) Reply LS on PDCCH Blind Detection in CA RAN2 LS out Rel-16 NR\_L1enh\_URLLC-Core To:RAN1

* [035] LS out is approved

BCS

[R2-2203409](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203409.zip) BCS for non-CA band combination Ericsson CR Rel-16 38.331 16.7.0 2956 - F NR\_newRAT-Core, TEI16

Moved from 6.1.4

* [035] Postponed

R15 DC combination without CA

[R2-2202525](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202525.zip) Support of DC combination without CA Apple CR Rel-15 38.306 15.16.0 0680 - F NR\_newRAT-Core

[R2-2202526](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202526.zip) Support of DC combination without CA Apple CR Rel-16 38.306 16.7.0 0681 - A NR\_newRAT-Core

DISCUSSION

* [035] Rapporteur: the single CC case can be further discussed in next meeting if interested companies would like to clarify it further.
* [035] Both Not Pursued
* [035] RAN2 understanding:

1. If the UE intends to report the support of DC but not CA for a band combination, the specification allows the UE to set FeatureSetUplinkId and FeatureSetDownlinkId for each band to non-zero value in the featureSetCombinationDC (for NR-DC), i.e. pointing to a valid feature set.  
2. In the featureSetCombination (for CA, mandatory present), the UE can set FeatureSetUplinkId and FeatureSetDownlinkId to 0.

Withdrawn

R2-2202527 Support of Multi-DCI based multi-TRP PUSCH operation Apple CR Rel-16 38.331 16.7.0 2894 - F NR\_eMIMO-Core Withdrawn

R2-2202528 Support of Multi-DCI based multi-TRP PUSCH operation Apple CR Rel-16 38.306 16.7.0 0682 - F NR\_eMIMO-Core Withdrawn

#### 6.1.4.4 Idle/inactive mode procedures

This agenda item addresses the idle and inactive behaviour specified in 38.304 or 36.304. Other aspects related to inactive (e.g. state transitions, out of coverage, etc) are covered under RRC agenda items

* [AT117-e][036][NR1516] Idle Inactive procedures (Lenovo)

Scope: Treat [R2-2202539](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202539.zip), [R2-2202220](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202220.zip), [R2-2202221](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202221.zip). Ph1 Determine agreeable parts, Ph2 for agreeable parts, progress CRs.

Intended outcome: Report, Agreed CRs.

Deadline: Schedule 1

[R2-2203815](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203815.zip) Report from email discussion [AT117-e][036][NR1516] Idle Inactive procedures (Lenovo) Lenovo discussion Rel-15

* [036] Noted, agreements reflected below

[R2-2202539](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202539.zip) Correction for cell reselection on CAG cells in white list Apple CR Rel-16 38.304 16.7.0 0229 - F NG\_RAN\_PRN-Core

Chair Comment: Please align language, white list is no longer allowed.

* [036] Not Pursued

R15 Corrections

[R2-2202220](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202220.zip) Addition of missing description on handling of Access Identities when cell is reserved for operator use Lenovo, Motorola Mobility, Nokia, Nokia Shanghai Bell, Ericsson CR Rel-15 36.304 15.7.0 0837 - F LTE\_5GCN\_connect-Core

[R2-2202221](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202221.zip) Addition of missing description on handling of Access Identities when cell is reserved for operator use Lenovo, Motorola Mobility, Nokia, Nokia Shanghai Bell, Ericsson CR Rel-16 36.304 16.6.0 0838 - A LTE\_5GCN\_connect-Core

* [036] both agreed

## 6.2 NR V2X

(5G\_V2X\_NRSL-Core; leading WG: RAN1; REL-16; started: Mar 19; target; Aug 20; WID: RP-200129).

Documents in this agenda item will be handled in a break out session

Tdoc Limitation: See tdoc limitation for Agenda Item 6

CR rapporteurs will take care of miscellaneous CRs to collect small changes. Please contact / coordinate with CR rapporteur company first for small changes (e.g. non-controversial clarification/correction, editorial correction, etc.).

### 6.2.1 General and Stage-2 corrections

Including incoming LSs, rapporteur inputs, etc.

[R2-2202147](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202147.zip) LS on Signalling of PC2 V2X intra-band concurrent operation (R4-2119992; contact: Xiaomi) RAN4 LS in Rel-16 To:RAN2

[R2-2202148](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202148.zip) LS on PEMAX for NR-V2X (R4-2120047; contact: Huawei, CATT) RAN4 LS in Rel-16 To:RAN1, RAN2

[R2-2202196](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202196.zip) Discussion on RAN4 LS on power class capability (R4-2119992) OPPO discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2202197](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202197.zip) Introduction of NR V2X power class OPPO CR Rel-16 38.306 16.7.0 0673 - B 5G\_V2X\_NRSL-Core

[R2-2202198](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202198.zip) Introduction of NR V2X power class OPPO CR Rel-16 38.331 16.7.0 2876 - B 5G\_V2X\_NRSL-Core

[R2-2202199](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202199.zip) Discussion on RAN4 LS on P\_EMAX (R4-2120047) OPPO discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2202470](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202470.zip) Draft reply LS on PEMAX for NR-V2X Qualcomm Finland RFFE Oy LS out Rel-16 5G\_V2X\_NRSL-Core To:RAN4

[R2-2202715](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202715.zip) Draft reply LS on Pemax for NR-V2X Huawei, HiSilicon, CATT LS out Rel-16 5G\_V2X\_NRSL-Core To:RAN4 Cc:RAN1

[R2-2202837](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202837.zip) Draft Reply LS on new power class capability for NR-V2X Xiaomi LS out To:RAN4

[R2-2202838](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202838.zip) Introduction of sidelink power class capability Xiaomi, Ericsson CR Rel-16 38.331 16.7.0 2912 - B 5G\_V2X\_NRSL-Core

[R2-2202839](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202839.zip) Introduction of sidelink power class capability Xiaomi, Ericsson CR Rel-16 38.306 16.7.0 0688 - B 5G\_V2X\_NRSL-Core

[R2-2203146](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203146.zip) Discussion on RAN4 LS on new power class capability for NR-V2X Xiaomi discussion

[R2-2203173](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203173.zip) Draft reply LS on PEMAX for NR-V2X vivo LS out Rel-16 To:RAN4 Cc:RAN1

[R2-2203175](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203175.zip) PEMAX for NR-V2X vivo discussion Rel-16

### 6.2.2 Control plane corrections

This agenda item may utilize a summary document on RRC (Huawei).

[R2-2202714](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202714.zip) Miscelleneous CR on 38.331 Huawei, HiSilicon CR Rel-16 38.331 16.7.0 2903 - F 5G\_V2X\_NRSL-Core

[R2-2202723](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202723.zip) Summary of RRC corrections Huawei, HiSilicon discussion Rel-16 5G\_V2X\_NRSL-Core Late

[R2-2203174](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203174.zip) Clarification on SL power control parameter vivo CR Rel-16 38.331 16.7.0 2932 - F 5G\_V2X\_NRSL-Core

[R2-2203286](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203286.zip) Correction on HARQ attribute of SL SRB option1 ZTE Corporation, Sanechips, OPPO CR Rel-16 38.331 16.7.0 2935 - F 5G\_V2X\_NRSL-Core

[R2-2203287](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203287.zip) Correction on HARQ attribute of SL SRB option2b ZTE Corporation, Sanechips,vivo CR Rel-16 38.331 16.7.0 2936 - F 5G\_V2X\_NRSL-Core

[R2-2203289](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203289.zip) Corrections on TS 38.304 ZTE Corporation, Sanechips CR Rel-16 38.304 16.7.0 0231 - F 5G\_V2X\_NRSL-Core

### 6.2.3 User plane corrections

Including [Post116-e][710][V2X/SL]. This agenda item may utilize a summary document on MAC (LG).

[R2-2202193](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202193.zip) Correction on UL-SL prioritization\_option1 OPPO CR Rel-16 38.321 16.7.0 1187 - F 5G\_V2X\_NRSL-Core

[R2-2202211](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202211.zip) Clarification on SDU type field usage for SL-SRB Samsung, Apple CR Rel-16 38.323 16.6.0 0084 - F 5G\_V2X\_NRSL-Core

[R2-2202299](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202299.zip) Correction on UL-SL prioritization\_option2 OPPO CR Rel-16 38.321 16.7.0 1188 - F 5G\_V2X\_NRSL-Core

[R2-2202360](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202360.zip) Corrections on Unexpected SL-BSR Trigger for SL-CSI MAC CE CATT CR Rel-16 38.321 16.7.0 1189 - F 5G\_V2X\_NRSL-Core

[R2-2202361](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202361.zip) Summary [POST116-e][710][V2X/SL] PDCP/RLC Entity Maintenance for SL-SRBs (CATT) CATT report Rel-16 5G\_V2X\_NRSL-Core

[R2-2202362](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202362.zip) Corrections on MAC filtering issue for the first unicast PC5-S signalling CATT draftCR Rel-16 38.321 16.7.0 F 5G\_V2X\_NRSL-Core

[R2-2202363](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202363.zip) Corrections on RLC entity establishment issue for the first unicast PC5-S signalling CATT draftCR Rel-16 38.322 16.2.0 F 5G\_V2X\_NRSL-Core

[R2-2202364](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202364.zip) Corrections on PDCP entity establishment issue for the first unicast PC5-S signalling CATT draftCR Rel-16 38.323 16.6.0 F 5G\_V2X\_NRSL-Core

[R2-2202534](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202534.zip) Correction on the PDB derivation from LCH priority Apple, OPPO CR Rel-16 38.321 16.7.0 1193 - F 5G\_V2X\_NRSL-Core

[R2-2202716](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202716.zip) Clarification on the UL and NR SL prioritization Huawei, HiSilicon, Lenovo, Motorola Mobility CR Rel-16 38.321 16.7.0 1201 - F 5G\_V2X\_NRSL-Core

[R2-2202843](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202843.zip) Correction on SL HARQ feedback indicator ASUSTeK CR Rel-17 38.321 16.7.0 1202 - F 5G\_V2X\_NRSL-Core

R2-2202947 Rapporteur CR on 38.321 LG Electronics France (Rapporteur) CR Rel-16 38.321 16.7.0 1205 - F NR\_SL\_enh-Core Late

[R2-2202949](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202949.zip) Correction of RV indication Samsung CR Rel-16 38.321 16.7.0 1207 - F 5G\_V2X\_NRSL-Core

[R2-2202956](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202956.zip) Summary of MAC corrections LG Electronics France discussion 5G\_V2X\_NRSL-Core Late

[R2-2203288](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203288.zip) Correction on HARQ attribute of SL SRB option2a ZTE Corporation, Sanechips CR Rel-16 38.321 16.7.0 1213 - F 5G\_V2X\_NRSL-Core

[R2-2203290](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203290.zip) Discussion on HARQ attribute of SL SRB ZTE Corporation, Sanechips,vivo discussion Rel-16

[R2-2203451](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203451.zip) Correction on NACK reporting on PUCCH for NR SL Huawei, HiSilicon, OPPO CR Rel-16 38.321 16.7.0 1217 - F 5G\_V2X\_NRSL-Core

[R2-2203479](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203479.zip) Correction on NACK reporting on PUCCH for NR SL Huawei, HiSilicon, OPPO CR Rel-16 38.321 16.7.0 1218 - F 5G\_V2X\_NRSL-Core

## 6.3 NR Positioning Support

(NR\_pos-Core; leading WG: RAN1; REL-16; started: Mar 19; target; Jun 20; WID: RP-200218).

(NR TEI16 Positioning)

Documents in this agenda item will be handled by email. No web conference is planned for this agenda item, and non-urgent documents may be postponed to next meeting.

Tdoc Limitation: See tdoc limitation for Agenda Item 6

### 6.3.1 General and Stage 2 corrections

Including incoming LSs, Including impact to 36.305 and 38.305. Stage 2 corrections shall be discussed with the specification rapporteur (Sven Fischer sfischer@qti.qualcomm.com) before submission. Stage 2 CRs not discussed with the specification rapporteur will not be treated.

This agenda item may use a summary document (decision to be made based on submitted tdocs).

[R2-2202119](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202119.zip) Reply LS to RAN2 on the misalignment in SRS configuration (R3-216009; contact: Samsung) RAN3 LS in Rel-16 To:RAN2 Cc:SA2

[R2-2202406](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202406.zip) Miscellaneous corrections in TS 38.305 CATT CR Rel-16 38.305 16.7.0 0085 - F NR\_pos-Core

### 6.3.2 RRC corrections

Including impact to 36.331, 38.331, and 38.306.

This agenda item may use a summary document (decision to be made based on submitted tdocs).

[R2-2202407](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202407.zip) Corrections on the description of maxNrofSRS-PosResources-1-r16 CATT CR Rel-16 38.331 16.7.0 2890 - F NR\_pos-Core

[R2-2202596](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202596.zip) Correction on srs-PosResourceIdList in RRC Huawei, HiSilicon CR Rel-16 38.331 16.7.0 2897 - F NR\_pos-Core

### 6.3.3 LPP corrections

This agenda item may use a summary document (decision to be made based on submitted tdocs).

[R2-2202224](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202224.zip) Addition of missing need code for the BDS TGD2 parameter Lenovo, Motorola Mobility CR Rel-16 37.355 16.7.0 0326 - F TEI16

[R2-2203275](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203275.zip) Correction of reference TRP for DL-AoD and Multi-RTT measurement report Qualcomm Incorporated CR Rel-16 37.355 16.7.0 0330 - F NR\_pos-Core

[R2-2203277](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203277.zip) Correction to NR-DL-PRS-ResourcesCapability field description Qualcomm Incorporated CR Rel-16 37.355 16.7.0 0331 - F NR\_pos-Core

[R2-2203367](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203367.zip) Introducing new high accuracy GAD shape with scalable uncertainty Ericsson, T-Mobile USA CR Rel-16 37.355 16.7.0 0333 - B TEI16

[R2-2203368](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203368.zip) Clarification on LPP segmentation Ericsson CR Rel-16 37.355 16.7.0 0334 - F NR\_pos-Core

### 6.3.4 MAC corrections

## 6.4 SON/MDT support for NR

(NR\_SON\_MDT-Core; leading WG: RAN3; REL-16; started: Jun 19; Completed June 20; WID: RP-191776).

Documents in this agenda item will be handled in a break out session

Tdoc Limitation: See tdoc limitation for Agenda Item 6

### 6.4.1 General and stage-2 corrections

Including incoming LSs, TS 37.320 corrections

[R2-2202223](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202223.zip) Corrections to SON/MDT capabilities Lenovo, Motorola Mobility CR Rel-16 38.306 16.7.0 0675 - F NR\_SON\_MDT-Core

Moved from 6.1.4.3

### 6.4.2 TS 38.314 corrections

[R2-2202707](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202707.zip) Correction to R16 38.314 on PRB Usage for MIMO CMCC CR Rel-16 38.314 16.4.0 0021 - F NR\_SON\_MDT-Core

### 6.4.3 RRC corrections

[R2-2202502](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202502.zip) Addition of missing information into RA-InformationCommon-r16 Apple, Ericsson CR Rel-16 38.331 16.7.0 2892 - F NR\_SON\_MDT-Core

[R2-2202737](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202737.zip) Correction on LTE UE RLF Report China Telecom, CATT, Ericsson discussion

[R2-2202783](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202783.zip) Corrections on LTE UE RLF Report China Telecom, CATT, Ericsson CR Rel-16 38.331 16.7.0 2906 - F NR\_SON\_MDT-Core

[R2-2203330](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203330.zip) On DAPS handover failure handling Ericsson CR Rel-16 38.331 16.7.0 2943 - F NR\_SON\_MDT-Core

[R2-2203332](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203332.zip) On including SSB and CSI-RS measurements in RLF report Ericsson CR Rel-16 38.331 16.7.0 2944 - F NR\_SON\_MDT-Core

[R2-2203333](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203333.zip) On ObtainCommonLocation related configuration Ericsson CR Rel-16 38.331 16.7.0 2945 - F NR\_SON\_MDT-Core

[R2-2203334](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203334.zip) On sensor information configuration Ericsson CR Rel-16 38.331 16.7.0 2946 - F NR\_SON\_MDT-Core

# 7 Rel-16 EUTRA Work Items

Only essential corrections. No documents should be submitted to 7. Please submit to 7.x

## 7.1 EUTRA Rel-16 General

No documents should be submitted to 7.1. Please submit to.7.1.x

Purely editorial corrections should be avoided, text enhancements may be deprioritized. Corrections should be taken up with the specification editor before submitting to avoid CR duplication. If this is not done, the contribution may not be treated.

### 7.1.1 Cross WI RRC corrections

Including RRC corrections that impact multiple WIs and require discussion in the common session.

### 7.1.2 Feature Lists and UE capabilities

Corrections to UE capabilities should be taken up with the 36.331 and 36.306 specification editors before submitting to avoid CR duplication. If this is not done, the contribution may not be treated.

## 7.2 Additional MTC enhancements for LTE

(LTE\_eMTC5-Core; LTE\_eMTC5-Core; leading WG: RAN1; REL-16; started: Jun 18; Completed: June 20; WID: RP192875;)

Documents in this agenda item will be handled in a break out session.

Some documents in 7.2 and 7.3 may be treated jointly.

## 7.3 Additional enhancements for NB-IoT

(NB\_IOTenh3-Core; leading WG: RAN1; REL-16; started: Jun 18; Completed: June 20; WID: RP-200293)

Documents in this agenda item will be handled in a break out session

Some documents in 7.2 and 7.3 may be treated jointly.

[R2-2202633](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202633.zip) Discussion on the issue for random access on multicarrier for NB-IoT CMCC discussion Rel-16 NB\_IOTenh3-Core

[R2-2202634](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202634.zip) Solution for random access issue on multiCarrier in NB-IoT CMCC draftCR Rel-16 36.331 16.7.0 F NB\_IOTenh3-Core

[R2-2202635](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202635.zip) Solution for random access issue on multiCarrier in NB-IoT CMCC draftCR Rel-16 36.321 16.6.0 F NB\_IOTenh3-Core

## 7.4 LTE Other WIs

(LTE\_feMob-Core; leading WG: RAN2; REL-16; started: Jun 18; Completed: June 20; WID: RP-190921)

(LTE\_terr\_bcast-Core, LTE\_DL\_MIMO\_EE-Core, LTE\_high\_speed\_enh2-Core; LTE TEI16 Non-positioning)

(Documents relating to Rel-16 LTE but for which there is no existing RAN WI/SI, e.g. LSs from CT/SA requesting RAN2 action)

Including TEI16 corrections and issues that do not fit under any other topic.

Purely editorial corrections should be avoided, text enhancements may be deprioritized. Corrections should be taken up with the specification editor before submitting to avoid CR duplication. If this is not done, the contribution may not be treated.

For LTE mobility enhancements, only corrections that are LTE-specific should be submitted to this AI. Corrections that impact or are common with NR mobility enhancements should be submitted to 6.1.X instead.

[R2-2202122](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202122.zip) Reply LS on Bearer pre-emption rate limit issue for GBR bearer establishment in MC systems (R3-216196; contact: Nokia) RAN3 LS in Rel-16 To:SA6 Cc:RAN, RAN2

[R2-2202929](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202929.zip) Minor changes collected by Rapporteur Samsung CR Rel-16 36.331 16.7.0 4766 - F NB\_IOTenh3-Core

## 7.5 LTE Positioning

(NavIC, LTE TEI16 Positioning)

Documents in this agenda item will be handled by email. No web conference is planned for this agenda item.

# 8 Rel-17 NR Work Items

## 8.0 General

Please input to 8.0.x. These AIs includes General Aspects regarding Rel 17, both NR and LTE, organizational and planning, common aspects regarding UE caps, RRC parameters, running CRs, need for organized inter-WI coord etc. A main purpose of this AI is to provide opportunity for rapporteurs and other highly interested to illuminate important aspects for the finalization phases of Rel-17. Input to this AI is optional. Note that the multi-WI topic of RACH indication and partitioning is handled under a separate AI.

### 8.0.1 RRC

Including discussions on plan for ASN.1 review. Note that Rel-17 Cat B RRC CRs (maybe with some exception) are expected to be WI-specific.

ASN.1 Review

Online first, offline to settle the details

[R2-2203417](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203417.zip) Rel-17 ASN.1 review plan Ericsson discussion Rel-17 TEI17

- Lenovo think the time plan is very though.

- MCC think that baseline RRC version can be available EoMarch (TS checking would then need to be done also during inactive period days).

- Chair indicate that it is not completely decided yet whether June TSG RAN is f2f or e-meeting (decision March 1). If f2f then it will be 1 week earlier than last time plan endorsed at TSG RAN, and also the R2 118 would be moved 1 week earlier.

- Huawei has some concerns with the tight time plan if R2 118 is moved 1 week earlier, maybe no ASN.1 ad-hoc.

- A number of companies prefer Rel-16 approach, as it is easier to organize the work acc to WIs.

- Xiaomi wonder if there will be assigned work focus. Ericsson think it can be done, but usually companies check everything anyway, so not sure.

- Huawei would prefer to include UE caps in the ASN.1 review. Think UE caps are complex.

- Intel think that UE cap Mega CRs will be submitted to TSG RAN and included in the specifications, so nothing special is needed to include UE caps in the ASN.1 reivew.

* We use the Rel-16 approach, i.e. comments and bookkeeping with the global ASN.1 review file, WI specific solutions can be in separate CRs, WI specific issues can be treated in parallel sessions.

[R2-2202600](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202600.zip) Considerations on the organization of R17 ASN.1 review Huawei, HiSilicon discussion Rel-17

DISCUSSION

P1

- Ericsson think it is difficult to prioritize ASN.1 only as it is all somewhat entangled.

- ESC think that ETSI forge may be used for file handling check-in check-out etc.

P6

- Ericsson think FTP is just very simple and used by everyone.

General

- Chair think proposal details can be discussed offline [037]

* For ASN.1 review, can prioritize issues with protocol impact.
* [AT117-e][037][R17] ASN.1 review (Ericsson, Samsung)

Scope: Start after on-line. Discuss the details, based on rapporteurs initiative, can e.g. discuss remaining aspects in [R2-2203417](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203417.zip) and R2-2200260.

Intended outcome: Enhanced ASN.1 review process, Detailed plan.

Deadline: EOM

CLOSED No Outcome, Continue as Short Post discussion

* [Post117-e][037][R17] ASN.1 review (Ericsson, Samsung)

Scope: Discuss further the details, based on rapporteurs initiative, can e.g. discuss remaining aspects in [R2-2203417](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203417.zip) and R2-2200260.

Intended outcome: Enhanced ASN.1 review process, Detailed plan.

Deadline: Short Post

R2-2203817 [AT117-e][037][R17] ASN.1 review (Ericsson) Ericsson discussion Rel-17

L1 Parameters (all WIs / AIs)

[R2-2202111](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202111.zip) LS on updated Rel-17 NR higher-layers parameter list (R1-2200700; contact: Ericsson) RAN1 LS in Rel-17 To:RAN2, RAN3 Cc:RAN4

Chair: To be taken into account for all the relevant WIs / AIs. To be reflected in WI-specific CRs

* Noted

[R2-2203883](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203883.zip) LS on updated Rel-17 LTE and NR higher-layers parameter list (R1-2202542; contact: Ericsson) RAN1 LS in Rel-17 NR\_feMIMO, NR\_ext\_to\_71GHz, NR\_IIOT\_URLLC\_enh, NR\_NTN\_solutions, NR\_pos\_enh, NR\_redcap, NR\_UE\_pow\_sav\_enh, NR\_cov\_enh, NR\_IAB\_enh, NR\_SL\_enh, NR\_MBS, NR\_DSS, LTE\_NR\_DC\_enh2, NR\_RF\_FR1\_enh, NR\_SmallData\_INACTIVE, NB\_IOTenh4\_LTE\_eMTC6, LTE\_NBIOT\_eMTC\_NTN, L To:RAN2, RAN3 Cc:RAN4

* Noted

### 8.0.2 UE capabilities

Feature lists from other groups and UE cap Mega CRs will be treated under this AI, except for NR\_ext\_to\_71GHz-Core and NR\_pos\_enh-Core for which all UE caps are treated under WI specific AI. Specific issues may be reallocated to WI-specific AIs.

Briefly online to confirm plan, then offline, can CB online W2 for specific issues.

[R2-2202662](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202662.zip) Rel-17 UE capability handling Intel Corporation discussion Rel-17 NR\_MBS-Core, NR\_IAB\_enh-Core, NR\_IIOT\_URLLC\_enh-Core, NR\_UE\_pow\_sav\_enh-Core, NR\_NTN\_solutions-Core, NR\_pos\_enh-Core, NR\_redcap-Core, NR\_SL\_enh-Core, NR\_feMIMO-Core, NR\_cov\_enh-Core, NR\_DL1024QAM\_FR1

DISCUSSION

- ZTE point out that parameter names are different between R1 and R2, and rapporteurs need to keep track of this

- Huawei wonder if we need to finish RAN2 features, if there are FFSes, what do we do. Chair think for R2 FFS we should not implement if the FFS if structure is impacted. Ericsson think we don’t have many such FFSes

- Vivo wonder if we need the LS

- Ericsson think we may inform something about naming mapping eg to FGs. Intel think this mapping is by the feature list for UE caps.

- CATT think the schedule now says that CRs cannot be worked on in Post discussions

- QC think that the P5 also applies to TEI, and wonder about the identification of features. Chair think it may be possible to use the TEI CR identifier

* All proposals are agreed

[R2-2202663](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202663.zip) Draft Reply LS to Rel-17 RAN1 and RAN4 feature list Intel Corporation LS out Rel-17 NR\_MBS-Core, NR\_IAB\_enh-Core, NR\_IIOT\_URLLC\_enh-Core, NR\_UE\_pow\_sav\_enh-Core, NR\_NTN\_solutions-Core, NR\_pos\_enh-Core, NR\_redcap-Core, NR\_SL\_enh-Core, NR\_feMIMO-Core, NR\_cov\_enh-Core, NR\_DL1024QAM\_FR1 To:RAN1. RAN4

DISCUSSION

- ZTE think that SDT is missing in the list of WIs

- Huawei: within brackets: remove no, replace and with or,

* With Comments above Approved in [R2-2203730](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203730.zip)

[R2-2202113](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202113.zip) LS on updated Rel-17 RAN1 UE features list for NR (R1-2200781; contact: NTT DOCOMO) RAN1 LS in Rel-17 To:RAN2 Cc:RAN4

* [038] Noted

[R2-2202154](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202154.zip) LS on Rel-17 RAN4 UE feature list for NR (R4-2202401; contact: CMCC) RAN4 LS in Rel-17 To:RAN2 Cc:RAN1

* [038] Noted

[R2-2203877](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203877.zip) LS on Rel-17 RAN4 UE feature list for NR (R4-2206282; contact: CMCC) RAN4 LS in Rel-17

* [038] Noted
* [AT117-e][038][NR17] UE caps Main (Intel)

Scope: Treat [R2-2202662](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202662.zip), [R2-2202113](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202113.zip), [R2-2202154](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202154.zip), [R2-2202657](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202657.zip), [R2-2202658](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202658.zip), Progress UE capabilities based on R1 and R4 feature lists, following the plan in [R2-2202662](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202662.zip), if needed determine questions for LS out. Record found Open Issues. This discussion is expected to continue as a post discussion after R2 117-e, merging UE capabilities from endorsed WI specific CRs (or draft CRs).

Intended outcome: Report, R17 NR UE Cap Mega CRs 38306 38331,

Deadline: Intermediate deadlines by Rapporteur, check point at EOM to see if partial endorsement is possible (to limit/focus the scope for the post discussion).

CLOSED Continue in a Post meeting discussion

DISCUSSION

* [038] Rapporteur: Since no comment is received on the resolution, It seems like the (-v05\_RappResolution) in the draft folder can be the baseline for merging of the endorsed CRs. Can Close this discussion and continue in a Post meeting discussion.
* [Post117-e][038][NR17] UE caps Main (Intel)

Scope: Progress UE capabilities following the plan in [R2-2202662](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202662.zip),

Intended outcome: Rel-17 NR UE Cap Mega CRs 38306 38331

Deadline: Short Post

[R2-2202657](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202657.zip) Release-17 UE capabilities based on R1 and R4 feature lists (TS38.306) Intel Corporation CR Rel-17 38.306 16.7.0 0685 - B NR\_MBS-Core, NR\_IAB\_enh-Core, NR\_IIOT\_URLLC\_enh-Core, NR\_UE\_pow\_sav\_enh-Core, NR\_NTN\_solutions-Core, NR\_pos\_enh-Core, NR\_redcap-Core, NR\_SL\_enh-Core, NR\_feMIMO-Core, NR\_cov\_enh-Core, NR\_DL1024QAM\_FR1

[R2-2202658](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202658.zip) Release-17 UE capabilities based on R1 and R4 feature lists (TS38.331) Intel Corporation CR Rel-17 38.331 16.7.0 2901 - B NR\_MBS-Core, NR\_IAB\_enh-Core, NR\_IIOT\_URLLC\_enh-Core, NR\_UE\_pow\_sav\_enh-Core, NR\_NTN\_solutions-Core, NR\_pos\_enh-Core, NR\_redcap-Core, NR\_SL\_enh-Core, NR\_feMIMO-Core, NR\_cov\_enh-Core, NR\_DL1024QAM\_FR1

### 8.0.3 Gaps Coordination

Tdoc limitation: 1

This AI is complementary to other AIs.

Treat offline, on-line CB Monday W2 if needed

* [AT117-e][039][NR17] Gaps Coordination (MediaTek)

Scope: Ph1: Take into account [R2-2202985](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202985.zip), [R2-2203346](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203346.zip), [R2-2202864](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202864.zip), [R2-2202888](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202888.zip), [R2-2202943](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202943.zip), [R2-2202209](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202209.zip), [R2-2202321](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202321.zip). Identify points for coordination that seems immediately agreeable. Determine whether LS out to RAN4 is needed. Lower priority: can also attempt to identify Open Issues that may be helpful for further work in Q2.

Ph2: LS approval

Intended outcome: Ph2 Approved LS out to R4

Deadline: Ph2 EOM

[R2-2203878](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203878.zip) Report of [AT117-e][039][NR17] Gaps Coordination (MediaTek) MediaTek

DISCUSSION

3.1

- MTK think that Method 2 is currently named ePos Gap.

- Intel think that Method 1 is R16 Gaps. LGE think M1 is what we are discussing in Rel-17.

3.2

- MTK think we should ask.

- ZTE think that only one need to be configured for POS, so when the GAP in Method 2 is activated it becomes M1 .. MTK think that this is one way to view this, but the main issue would be simultaneous use.

- HW think we don’t need to send LS.

- LGE also think we dont need to ask, can leave to impl.

General

- Intel wonder whether R2 need to act on the latest LS from R4 on ePRS. MTK think this need to be discussed.

* R2 to wait more progress on NTN gap before discussing the co-existence between NTN gap and other gap features.
* R2 assumes no conflict between MUSIM and other gap features. Joint configuration of MUSIM gap and other gap features is supported from signaling point of view. R2 understands that no R4 requirement on MUSIM gap itself or combination of MUSIM gap with other gap
* Send LS to R4 (cc R1) on gap coordination with the following information/questions: (Detail LS content could be discussed in phase 2)

RAN2 signaling will in general support joint configuration for all gap features (i.e. pre-configured MG, concurrent gap, NCSG, MUSIM gap, and ePOS gap)

RAN2 assumes that the detailed UE behaviour while gaps are overlapped in time domain is R4 knowledge.

Whether there is restriction on joint configuration of some gap features from R4 perspectives

The total number of gaps that could be activated to the UE

LS details offline

R2-2203879 LS on coordination of R17 gap features MediaTek LS out Rel-17 NR\_MG\_enh-Core, LTE\_NR\_MUSIM-Core, NR\_pos\_enh-Core, NR\_NTN\_solutions-Core To:RAN4 Cc:RAN1

[R2-2202985](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202985.zip) Consideration on gaps coordination ZTE Corporation, Sanechips discussion Rel-17

[R2-2203446](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203446.zip) Gaps coordination Ericsson discussion Rel-17

[R2-2202864](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202864.zip) Discussion on gap coordination MediaTek Inc. discussion R2-2201238

[R2-2202888](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202888.zip) Discussion on gaps coordination Huawei, HiSilicon discussion Rel-17 NR\_MG\_enh-Core

[R2-2202943](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202943.zip) Discussion on gaps coordination Samsung Electronics Co., Ltd discussion Rel-17 NR\_MG\_enh-Core

[R2-2202209](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202209.zip) Consideration for Gaps Coordination OPPO discussion Rel-17

[R2-2202321](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202321.zip) Discussion on Gap coordination vivo discussion Rel-17 NR\_MG\_enh-Core, LTE\_NR\_MUSIM-Core, NR\_pos\_enh-Core

* [039] 7 tdocs Noted

### 8.0.4 Other

Online first

E.g. cross WI coordination on MAC CEs.

[R2-2203317](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203317.zip) Cross WI coordination on MAC CEs and LCIDs Huawei, HiSilicon discussion Rel-17

* Noted

A related TEI-proposal

[R2-2203285](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203285.zip) LCID configuration for MAC CEs Nokia, Nokia Shanghai Bell discussion Rel-17 TEI17

* Noted

DISCUSSION

- Huawei think the issue is which MAC CEs shall use LCID vs eLCID

- Nokia think LCIDs can be configured, as they are normally not used at the same time

- vivo think there may be some issues for resolving if configuring LCIDs want to keep simple.

- Apple ok with HW paper, Nok proposal not needed.

- LGE think indeed there is an issue, and want to discus offline. Need to also consider LCP

- ZTE support HW paper, think we discussed similar to NOK proposal in R16 and was rejected. OPPO agrees.

- Ericsson ok with HW approach, think it is too late for Nok. Think we are already following HW proposal. Intel agrees.

- Nokia think the difference to R16 is that we are introducing more and more features.

- Samsung think each WI can do this and we can harmonize during impl phase.

- LGE think it is better to coordinate LCP priority now. Huawei agrees.

* Confirm that coverage limited cases shall use LCID, other cases use eLCID.
* Expect that LCP priority for MAC CEs may need to be corrected to achieve inter WI consistency, can do that later.

## 8.1 NR Multicast

(NR\_MBS-Core; leading WG: RAN2; REL-17; WID: RP-201038)

Time budget: 2 TU

Tdoc Limitation: 4 tdocs

### 8.1.1 General

#### 8.1.1.1 Organizational

Tdoc Limitation: 0

Planning etc

[R2-2203316](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203316.zip) Open issue list for NR MBS Huawei, HiSilicon discussion Rel-17 NR\_MBS-Core

* Noted

#### 8.1.1.2 LS in

Tdoc Limitation: 0

LS in. For LSes that need action or has impact beyond taking into account by CR rapporteurs: One tdoc by contact company (one company) to address the LS and potential reply is considered Rapporteur Input and may be provided.

[R2-2202114](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202114.zip) LS reply to MBS broadcast reception on SCell and non-serving cell (R1-2200798; contact: Huawei) RAN1 LS in Rel-17 To:RAN2

* Noted

[R2-2202142](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202142.zip) Reply LS on paging for multicast session activation notification (R3-221470; contact: Samsung) RAN3 LS in Rel-17 To:RAN2 Cc:SA2

* Noted

[R2-2202130](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202130.zip) LS on MBS Service Area Identity and start procedure for broadcast service (R3-221302; contact: CATT) RAN3 LS in Rel-17 To:SA2 Cc:SA6, RAN2

* Noted

[R2-2203727](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203727.zip) Reply LS on MBS Service Area Identity and start procedure for broadcast service (S2-2201517; contact: CATT) SA2 LS in Rel-17 5MBS, NR\_MBS-Core To:RAN3, RAN2, SA6 Cc:SA4, SA5

- R2 to decide length of ID

- Huawei are ok w 3 bytes. LGE also think we can follow SA2 suggestion of 3 bytes

- Lenovo think 2 bytes is sufficient.

- CATT are ok with 2 or 3 bytes.

* MBS FSA ID is 3 bytes

Offline (CATT) reply LS with this info (simple short offline, approval W2 Tuesday)

* [AT117-e][066][MBS] Reply LS on MBS Service Area Identity and start procedure for broadcast service (CATT)

Intended outcome: Approved LS out (offline only no CB)

Deadline: VERY SHORT W2 Tuesday 0900 UTC

CLOSED

[R2-2203902](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203902.zip) Reply LS on the Length of MBS Service Area Identity RAN2 LS out Rel-17 5MBS To:SA2 Cc:RAN3,SA4

* [066] Approved

[R2-2202141](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202141.zip) LS on NR RRC to support split NR-RAN architecture for NR MBS (R3-221469; contact: Ericsson) RAN3 LS in Rel-17 To:RAN2

* Noted

[R2-2204082](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204082.zip) Reply LS on Multicast paging with TMGI (S3-220537; contact: Huawei) SA3 LS in Rel-17 5MBS To:SA2 Cc:RAN2

[R2-2203994](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203994.zip) Reply LS on NR RRC to support split NR-RAN architecture for NR MBS RAN2 LS out Rel-17 NR\_MBS-Core To:RAN3

=> Revised in R2-2204088

R2-2204088 Reply LS on NR RRC to support split NR-RAN architecture for NR MBS RAN2 LS out Rel-17 NR\_MBS-Core To:RAN3

[R2-2203772](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203772.zip) Reply LS on maximum number of MBS sessions that can be associated to a PDU session (S6-220262; contact: Ericsson) SA6 LS in Rel-17 5MBS To:SA2 Cc:CT1, SA4, SA6, RAN2, RAN3

* [AT117-e][040][MBS] Reply LS on max no of MBS sessions that can be associated to a PDU session (Ericsson)

Scope: Collection opinions and determine agreements in order to reply to Reply to LS in R2-2200141 (received at R2 116bis-e)

Intended outcome: Agreeable LS out (and a Report if applicable).

Deadline: W1 Thursday (for on-line CB W1 Friday)

[R2-2203776](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203776.zip) [AT117-e][040][MBS] Reply LS on max no of MBS sessions that can be associated to a PDU session (Ericsson) Ericsson discussion Rel-17 NR\_MBS-Core

* [040] Noted, agreements reflected in the LS below.

[R2-2203777](C:\\Users\\mtk65284\\Documents\\3GPP\\tsg_ran\\WG2_RL2\\TSGR2_117-e\\Docs\\R2-2203777.zip" \o "C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203777.zip) Draft Reply LS on maximum number of MBS sessions that can be associated to a PDU session Ericsson LS out Rel-17 NR\_MBS-Core SA2 RAN3, CT1, SA4, SA6

* [040] Revise the text “Additionally, RAN2 agreed that the UE may signal whether it supports more MRBs, on top of this minimum requirement, but the number is still discussed. Note that RAN2 is still discussing if a maximum number for concurrent MRBs themselves is additionally defined” into “Additionally, RAN2 agreed that the UE may signal whether it supports more MRBs, up to 16 additional MRBs on top of this minimum requirement”
* [040] With the revision above the LS out is approved in R2-220xxxx

New LS in

[R2-2203884](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203884.zip) Reply LS on MBS SPS (R1-2202591; contact: CMCC) RAN1 LS in Rel-17 NR\_MBS To:RAN2

* Noted

[R2-2203886](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203886.zip) LS reply about the MBS issues (R1-2202611; contact: Huawei) RAN1 LS in Rel-17 NR\_MBS-Core To:RAN2

* Noted

[R2-2204043](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204043.zip) LS reply on MBS broadcast reception on SCell (R1-2202727; contact: Huawei) RAN1 LS in Rel-17 NR\_MBS-Core To:RAN2

- Chair wonder if we then can assume that UE can receive Bcast on Scell, and SIB-x is delivered by dedicated signalling to the UE.

- Nokia wonder if L1 is really difficult to change. Chair: this is not clear, but we did get a reply and the reply seems to have a celar message. Hesitant to ask again.

* UE can receive Bcast on Scell, and SIB-x is delivered by dedicated signalling to the UE

Chair: can attempt to capture this in the CR discussion.

#### 8.1.1.3 CRs and Rapporteur Resolutions

Tdoc Limitation: 0.

CR Rapporteurs to provide running CRs, potentially updated, Provide resolution proposals to Rapporteur Handled Open Issues, see R2-2202025.

* [AT117-e][075][MBS] UE Capability CRs (MediaTek)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Endorsed Draft CRs For merge 38306 38331

Deadline: EOM (offline)

* [Post117-e][076][MBS] 38300 CR (CMCC)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][077][MBS] 38331 CR (Huawei)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][078][MBS] 38304 CR (CATT)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][079][MBS] 38321 CR (OPPO)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][080][MBS] 38322 CR (vivo)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][081][MBS] 38323 CR (Xiaomi)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][082][MBS] 37324 CR (Samsung)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [AT117-e][041][MBS] CR and Rapporteur Resolutions (Huawei)

Scope: For all CR Rapporteur resolutions, and the updated CRs, Collect comments, Address simple comments, to reach endorsable state. Aim to agree the CR Rapporteur resolutions and endorse the CRs (such that changes-on-changes redundant editors notes etc then can be removed). For MAC, the rapporteur proposes two options, a choice should be made. Rapporteur of this discussion is responsible for collecting comments into a document, and report on those. Each CR rapporteur is responsible for CR update, if update is needed.

Intended outcome: Report. Agreement of Resolutions to Rapporteur issues. CRs, revised if needed, that are endorsable.

Deadline: W1 Thursday (for on-line endorsement W1 Friday)

CLOSED

Online W1 Friday

- Rapporteur of [041] indicates that formal report of this discussion is not needed.

MAC

[R2-2202245](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202245.zip) Introduction of NR MBS in 38.321 OPPO CR Rel-17 38.321 16.7.0 1184 - B NR\_MBS-Core

- no change just baseline TS update, no OI resolutions.

* Baseline for further update

=> Revised in R2-223818

R2-2203818 Introduction of NR MBS in 38.321 OPPO CR Rel-17 38.321 16.7.0 1184 1 B NR\_MBS-Core [R2-2202245](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202245.zip)

[R2-2202246](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202246.zip) Resolution proposals to Rapporteur Handled Open Issues in MAC CR OPPO discussion Rel-17 NR\_MBS-Core

- LG suggests to discuss P3. Think we can limit to CRNTI use for unicast wrt NDI toggling. LG think there is an issue with sim retransmission on PTP and PTM. Huawei think there was no consensus to support such case in R1

- Huawei think a clear majority prefers to keep the agreement from last meeting. Nokia and Samsung agrees.

* P1: remove the 1st and 3rd editor notes in the referred table from MAC running CR.
* P3: We stick to current agreement, R2 understands that the following is not supported for a UE: sim retransmissions on PTP and PTM, retransmission on PTM after retransmission on PTP.
* P4: confirm the below option and the 4th editor notes is removed:

- Option 2 （as current agreements）: If PTP for PTM retransmission is enable in DCI, i.e. up to network. The UE will always start the unicast RTT timer and PTM RTT timer at the same time. The unicast retransmission timer is started after the unicast RTT expires.

[R2-2203149](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203149.zip) Correction on MBS DRX due to PTP for PTM retransmission OPPO draftCR Rel-17 38.321 16.7.0: B NR\_MBS-Core

* [041] Noted

Idle Inactive

[R2-2202271](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202271.zip) 38\_304\_Running\_CR\_for\_MBS\_in\_NR CATT CR Rel-17 38.304 16.7.0 0221 3 B NR\_MBS-Core R2-2201971

[R2-2203811](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203811.zip) 38\_304\_Running\_CR\_for\_MBS\_in\_NR CATT CR Rel-17 38.304 16.7.0 0221 4 B NR\_MBS-Core [R2-2202271](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202271.zip)

* Endorsed, baseline for further update

[R2-2202385](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202385.zip) Resolution to Rapporteur Handled Open Issues in 38.304 CR CATT discussion Rel-17 NR\_MBS-Core

* [041] Noted

R2-2203779 Resolution to Rapporteur Handled Open Issue in 38.300 CR CMCC discussion Rel-17 NR\_MBS-Core

RRC

[R2-2203341](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203341.zip) Introduction of NR MBS into TS 38.331 Huawei, HiSilicon CR Rel-17 38.331 16.7.0 2949 - B NR\_MBS-Core Late

* Endorsed, baseline for further update

[R2-2203342](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203342.zip) Rapporteur handled issues for RRC CR of NR MBS Huawei, HiSilicon discussion Rel-17 NR\_MBS-Core Late

* [041] Noted

Stage 2

[R2-2202727](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202727.zip) 38.300 Running CR for MBS in NR CMCC CR Rel-17 38.300 16.8.0 0409 - B NR\_MBS-Core

[R2-2203878](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203878.zip) 38.300 Running CR for MBS in NR CMCC CR Rel-17 38.300 16.8.0 0409 1 B NR\_MBS-Core ??? No such revision exists..

- Capture last meeting’s agreements (was not updated and reviewed last meeting)

* Endorsed, baseline for further update

[R2-2203778](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203778.zip) 38.300 Running CR for MBS in NR CMCC, Huawei CR Rel-17 38.300 16.8.0 0342 8 B NR\_MBS-Core R2-2111605

RLC

[R2-2202277](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202277.zip) 38.322 Running CR for NR MBS vivo, Huawei, HiSilicon CR Rel-17 38.322 16.2.0 0045 - B NR\_MBS-Core

* Endorsed, baseline for further update

SDAP

[R2-2202300](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202300.zip) Introduction of NR MBS Samsung CR Rel-17 37.324 16.3.0 0022 - B NR\_MBS-Core

* Endorsed, baseline for further update

PDCP

[R2-2203771](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203771.zip) 38.323 Running CR for NR MBS Xiaomi Communications draftCR Rel-17 38.323 16.6.0 - B NR\_MBS-Core R2-2201729

- Rap report that it has been updated to align with RRC CR, and removal of redundant editors notes.

* Baseline for further update

UE capabilites

[R2-2202786](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202786.zip) Draft 306 CR for MBS UE capabilities MediaTek Inc. draftCR Rel-17 38.306 16.7.0 B NR\_MBS-Core

=> Revised in R2-2203969

R2-2203969 Draft 306 CR for MBS UE capabilities MediaTek Inc. draftCR Rel-17 38.306 16.7.0 B NR\_MBS-Core

[R2-2202787](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202787.zip) Draft 331 CR for MBS UE capabilities MediaTek Inc. draftCR Rel-17 38.331 16.7.0 B NR\_MBS-Core

=> Revised in R2-2203970

R2-2203970 Draft 331 CR for MBS UE capabilities MediaTek Inc. draftCR Rel-17 38.331 16.7.0 B NR\_MBS-Core

### 8.1.3 Open Issues

#### 8.1.3.1 Pre-discussions

Tdoc Limitation: 0.

Pre117-e discussions to gather company input on specific Open Issues.

Please see R2-2202025: 11 RRC related Open issues, 6 MAC related Open issues, 1 38304 Open Issue, 1 PDCP Open Issue, 1 38300 Open Issue, 2 UE caps Open Isseus, 4 Other Open Issues (exact organization into different discussions is TBD)

Companies to provide input into the following discussion:

[Pre117-e][001][MBS] CP open Issues Input (Huawei)

[Pre117-e][002][MBS] UP open Issues Input (Samsung)

[R2-2203343](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203343.zip) Report of: [Pre117-e][001][MBS] CP open Issues Input Huawei, HiSilicon discussion Rel-17 NR\_MBS-Core Late

[R2-2203764](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203764.zip) Report of: [Pre117-e][001][MBS] CP open Issues Input Huawei, HiSilicon discussion Rel-17 NR\_MBS-Core Late

DISCUSSION

- LGE wonder if reassembly is disabled for MCCH. Huwei think yes, but think the values can be reconfigured. LGE think for MTCH segmentation is used. Huawei think that it is just for signalling optimization.

- QC think the up to RAN3 desc for P10 can be removed.

- CMCC think for P1 sn-length of 6 would be more reasonable. Huawei think 12 was the majority view. Intel agrees and think this is not configured but fixed. Huawei would be ok with 6 and think it works.

- P7: OPPO wonder about RRC inactive, and wonder about NAS impact. Huawei think we just do this in AS. Nokia agrees that it is difficult to involve NAS. Vivo also agree on P7 and P8

- P9: vivo think we need a FFS on the paging groups.

- P10: LGE think it si not clear whether MRB can be reconfigured at HO from UM to AM. This need to be confirmed from Stage-3 point of view

- p10 ZTE think this is contradicting R2 decisions/assumptions. Huawei think it can be supported and there was support by most companies. ZTE think DF is initiated by the src node, could be a lot of TS impact.

P4

- Nokia wonder that if we have DRX why do we need the window? Why do we need two ways of configuring. Huawei think that the easiest to just follow R1 agreement and configure a window. Nokia think R1 is assuming DRX configuration. MTK has the same view as Nokia.

- CMCC think that coupling DRX and Window is complex.

P14

- OPPO wonder if SCell is SCell on MCG or also SCG. Huawei assumes MCG and think SCG is out of scope of WI.

- MTK think that SCell reception may need to support rx of SIB in special way so this could be low priority. Think we can allow non-serving cell Bcast RX but no UE capability signalling needed, separate receiver.

- Nokia are interested in the Scell capability, and network would need to know. Regarding non-serving cell RX, maybe not critical to specify, but ok to support with low impact

P16

- QC think R1 already agreed to use dedicated signalling.

- QC think for P15, this should not be per UE, but instead e.g. per component carrier

- CATT support dedicated RRC signalling

- ZTE think direct SIB read is same as legacy and is reasonable. Dedicated RRC delivery may be complicated. Samsung think dedicated delivery may not work.

- MTK wonder what is the impact of UE unicast reception if we support Bcast on Scell. Nokia wonder why BCCH cannot be received on SCell if MCCH MTCH can be received. Huawei think this was simply a R1 agreement

* P1 (for broadcast): Confirm the following fixed configuration for MCCH:

• RLC: sn-FieldLength = 6

• RLC: t-Reassembly = ms0

* P2 (for broadcast): Confirm the following default configuration for MTCH:

• PDCP: t-Reordering = 0

• PDCP: pdcp-SN-SizeDL = 18

• PDCP: No RoHC default configuration

• RLC: sn-FieldLength = 12

• RLC: t-Reassembly = ms0

* P5: MBS Interest Indication is not exchanged during SCG change operation (no specifications impact).
* P6: There is no need for any modifications for MII framework needs to allow the UE to indicate the UE is interested in MBS broadcast on SCell (or non-serving cell).
* P7: UEs configured with Access Identity 1 / 2 / 11-15 should utilize mps-PriorityAccess / mcs-PriorityAccess / highPriorityAccess as a resume cause, respectively, when replying to group paging (i.e. the same as in the case of unicast RAN paging).
* P8: There is no need to specify any specific establishment cause handling due to Group Paging of RRC IDLE UEs configured with special Access Identities (AIs 1, 2, 11-15).
* P9: RAN2 confirms the following values for multiplicity and type constraints parameters for NR MBS:

• maxDCI-4-2-Size-r17 = 140

• maxFreqMBS-r17 = 5, FFS if higher value, e.g. 8 or 16 is needed

• maxNrofDRX-ConfigPTM-r17 = 64

• maxNrofMBS-ServiceListPerUE-r17 = 16

• maxNrofMBS-Session-r17 = 1024

• maxNrofMRB-Broadcast-r17 = 4, FFS if a higher value, e.g. 8, is needed

• maxNrofPageGroup-r17 = 32

• maxNrofPDSCH-ConfigPTM-1-r17 = 15

• maxG-RNTI-r17 = 16, FFS the final value should be different based on the related RAN1 discussion on UE capabilities

• maxG-CS-RNTI-r17 = 8, FFS the final value should be different based on the related RAN1 discussions on UE capabilities and G-CS-RNTI to MBS SPS mapping

• maxMRB-r17 = 16

• maxSAI-MBS-r17 = 64

• maxNeighCell-MBS-r17 = 8

* P10: It is assumed that Data forwarding and/or PDCP SR can be used during handover in case the UE is configured with PTP RLC AM entity in the target cell, regardless of whether PTP RLC AM entity was configured in the source cell.
* P11: No further optimizations are pursued for neither solution 1 nor 2 in Rel-17, i.e. it is up to network and/or UE implementation how to minimize/avoid data loss during handover to non-MBS supporting node with either solution 1 or 2, as agreed in the last meeting.
* P12: RoHC is mandatory for UEs supporting MBS broadcast:

• At least profiles 0x0000, 0x0001, 0x0002 are supported. FFS other profiles.

• FFS how many RoHC context sessions the UE has to mandatorily support. The number between 2 and 16 should be chosen.

- RoHC profile 0x0006 is not used / configurable for broadcast MRB.

* P4: (for broadcast) MTCH window (e.g. periodicity and offset) is configurable per G-RNTI. The PDCCH occasion to SSB mapping will be described in TS 38.331, as per RAN1/RAN2 agreements.
* Send LS to R1 asking about SIB reception for receiving Bcast on Scell, considering that MCCH also need to be received.

W1 Friday on the LS out, [AT117-e][065][MBS] LS on SIB reception for receiving Bcast on Scell (Huawei)

[R2-2203773](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203773.zip) LS on MBS broadcast reception on SCell RAN2 LS out Rel-17 NR\_MBS-Core To:RAN1

- Nokia wonder if we should mention that UE cap is optional. Huawei think this was already mentioned in the prev LS exchange

* LS is Approved

[R2-2202685](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202685.zip) Report of [Pre117-e][002][MBS] UP open Issues Input Samsung discussion Rel-17 NR\_MBS-Core Late

P11

- QC wonder how this works with Mcast only UE. Samsung think there are no particular config restrictions.

P9

- LGE think that we need to check MAC reset applicability to MCast. Samsung think RRC usage can be discussed. Huawei wonder in which scenario this MAC reset is needed. Samsung think this is described in the doc. Samsung think either unicast MAC reset is triggered or multicast MAC reset is triggeres

- Huawei wonder about the granularity. Samsung think a MAC entity is reset.

- OPPO wonder if we need a new section for Multicast MAC reset. Samsung think as SL and Uu reset is in the same section, then we continue using one section, and it is requested from upper layer.

- Huawei think the current RRC CR has no differentiation of resets, think unicast and multicast MAC reset are done at the same time.

P1 P2

- LGE think the gain is not much and the complexity will be increased, esp in the network side.

- QC think there is not much add complexity, similar to unicast, and also the gain similar to unicast. Nokia agrees, and think same can be applied with short DRX.

- Samsung OPPO are ok to have DRX MAC CE for sake of progress

P3

- Samsung think not all UEs will have HARQ Ack so for Mcast the chance of state mismatch is significant, and thus not support short DRX.

- nokia think that indeed there can be some misalignments, but not more serious for Short DRX than misaglinment e.g. for data inact timer etc.

- QC think that the main use case is MCPTT. Huawei think that for this case we can just have single DRX but with a shorter cycle.

- Chair: Not sufficient support to support Short DRX

P5

- LGE support P5 think that if UE want to receive retransmission for other UE if can be done by pure UE impl.

- ZTE think UE need to be allowed to be awake, and the enabling of HARQ feedback mcy be related to the UL situation of the UE. CMCC that blind retransmission is handled by other config.

- Samsung think that for blind retransmissions UE just need to have longer active time.

P7

- SS think the main issue is that HARQ processes is shared between Bcast and Unicast.

- ZTE wonder then whether network need to be aware. SS think majority view is that no ID is needed.

P10

- Huawei think LCID should follow the MRB ID. QC agrees.

- MTK think LCID should be extended.

- LGE vivo CATT agree with P10

* P4. If there is no real HARQ feedback transmission due to ACK in NACK only case, the UE will not start DRX RTT timer. After DRX RTT timer expires, UE will not start DRX retransmission timer if the corresponding MAC PDU is decoded successfully. (Same as the current MAC running CR, no further change)
* P8. For Bcast, It’s fully up to UE implementation to prevent COUNT wrap-around.
* P9. MBS specific MAC Reset is introduced (to be confirmed). The following procedure is a baseline (Detail can be further discussed):

- stop (if running) all timers associated to Multicast;

- flush the soft buffers for all DL HARQ processes associated to MBS Multicast;

- for each DL HARQ process associated to MBS Multicast, consider the next received transmission for a TB as the very first transmission;

- initialize Bj for each logical channel associated to Multicast MRB to zero.

* P11. In PTP for PTM retransmission, the UE monitors UE specific PDCCH/CS-RNTI only during unicast DRX’s active time. Unicast DRX’s RTT timer can be started when PTP retransmission is expected.
* P1. DRX Command MAC CE for MBS Multicast is supported.
* P2. DRX Command MAC CE for Multicast DRX is scheduled by G-RNTI and existing LCID value
* P3. Short DRX Cycle for MBS DRX is not supported.
* P5. If HARQ-ACK feedback is disabled or not configured, HARQ RTT timer is not started
* P7. There are no dedicated HARQ process IDs for MCCH and Broadcast MTCH (assumption: single HARQ process for MCCH and single HARQ process for MTCH, not clear whether they can share the same, details would be RAN1 scope)
* P10. For Multicast, Each MTCH logical channel has a unique LCID (The same LCID value cannot be shared by multiple MTCHs within a UE).

Offline Continuation.

- Continue discussion on the Mcast MAC reset (when to trigger it, detailed modifications to behaviour if neded), confirm that it is needed.

- RRC indication to enable/disable C-RNTI based PTM retransmission can be discussed further (baseline no indication/configuration)

* [AT117-e][002][MBS] UP Open Issues (Samsung)

Scope: Based on [R2-2202685](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202685.zip), Continuation including both UP and RRC aspects.

- Continue discussion on the Mcast MAC reset (when to trigger it, detailed modifications to behaviour if neded), confirm that it is needed.

- RRC indication to enable/disable C-RNTI based PTM retransmission can be discussed further (baseline no indication/configuration)

Intended outcome: Report

Deadline: For online CB W2 Wednesday

CLOSED

[R2-2204015](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204015.zip) Report of Offline 002: UP Open Issues Samsung discussion Rel-17 NR\_MBS-Core

March 3

* Multicast MAC Reset is not introduced.
* RRC configuration to enable/disable C-RNTI based PTP retransmission of PTM initial transmission is not introduced.
* If the PDCCH indicates a DL multicast transmission or MAC PDU on multicast SPS is received, both *drx-HARQ-RTT-TimerDL-PTM* and *drx-HARQ-RTT-TimerDL* are started.
* Two-octet eLCID field is used for logical channels of PTM RLC. It’s up to NW configuration to use LCID field or eLCID field.
* Two-octet eLCID field is mandatory for all UEs supporting multicast.

[R2-2204017](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204017.zip) LS on HARQ process for MCCH and Broadcast MTCH(s) RAN2 LSout to:RAN1

* LS out is approved

#### 8.1.3.2 Invited Input

Invited company input on the following Open Issues Please see R2-2202025

- MAC: FFS to CSI and SRS reporting due to MBS DRX.

- Other: the questions in R3-221469 LS on NR RRC to support split NR-RAN architecture for NR MBS

UP

* [AT117-e][042][MBS] Invited tdocs open Issues UP (Samsung)

Scope: Take into account submitted tdocs. Address the FFS on CSI and SRS reporting due to MBS DRX, and from the updated OIlist: Small correction on RX\_DELIV formula to avoid HFN<0. Determine agreeable part, pave the way for on-line agreement.

Intended outcome: Report

Deadline: W1 Thursday (for online CB W1 Friday).

[R2-2203761](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203761.zip) Report of Offline 042: Invited Tdocs Open Issues UP Samsung discussion Rel-17 NR\_MBS-Core

DISCUSSION

P2

- Intel doesn’t understand the motive, as unicast DCP only impact unicast DRX which is separate to multicast DRX. Samsung agrees, but think there would be SRS and CSI reporting impact.

- LGE wonder about DCPWUS for multicast. Samsung think DCPWUS is only for unicast.

- CMCC think we can just specify that there is no impact on MBS DRX.

- QC are ok either way, but clarification is needed as it applies to PTP, e.g. that if bearer is PTM only then not configured.

P3

- xiaomi think the note should be more general.

- LGE has strong concerns on such note.

* gNB configures whether to report CSI on PUCCH/semi-persistent CSI configured on PUSCH and transmit periodic SRS/semi-persistent SRS during Active Time of multicast DRX and non-Active Time of unicast DRX. FFS: CSI-mask for multicast OnDuration.
* Assume that Unicast DCP monitoring/WUS may be configured when Multicast DRX is configured. CSI reporting, SRS impact, and whether some restriction need to be captured is FFS (can revert the assumption if the FFS resolution turns out to be complex)-
* On HFN < 0, The current derivation formula of initial RX\_DELIV in 38.323 CR is kept. R2 assumes it is up to network implementation to ensure that HFN part of RX\_DELIV should be a positive value (TS impact if any is FFS, e.g. a NOTE in RRC or PDCP)

[R2-2202301](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202301.zip) Discussion on CSI reporting and RX\_DELIV initialization Huawei, Qualcomm,HiSilicon discussion Rel-17 NR\_MBS-Core

[R2-2202242](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202242.zip) Discussion on open issues in MAC running CR OPPO discussion Rel-17 NR\_MBS-Core

[R2-2202268](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202268.zip) Consideration on UP Remaining Issues of MBS CATT, CBN discussion Rel-17 NR\_MBS-Core

[R2-2202278](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202278.zip) Open issue for CSI and SRS reporting due to MBS DRX NEC Europe Ltd discussion Rel-17 NR\_MBS-Core

[R2-2202333](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202333.zip) Discussion on CSI and SRS reporting for MBS MediaTek inc. discussion Rel-17 NR\_MBS-Core

[R2-2202425](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202425.zip) Discussion on CSI and SRS reporting due to MBS DRX Spreadtrum Communications discussion Rel-17

[R2-2202554](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202554.zip) MBS DRX mechanism Apple discussion Rel-17 NR\_MBS-Core

[R2-2202624](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202624.zip) Discussion on CSI and SRS reporting CMCC discussion Rel-17 NR\_MBS-Core

[R2-2202642](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202642.zip) CSI and SRS reporting due to MBS DRX Intel Corporation discussion Rel-17 NR\_MBS-Core

[R2-2202683](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202683.zip) CSI and SRS reporting in Multicast DRX Samsung discussion Rel-17 NR\_MBS-Core

[R2-2202799](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202799.zip) On CSI-report and SRS transmission at DRX with MBS and unicast Futurewei discussion Rel-17 NR\_MBS-Core

[R2-2202830](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202830.zip) Remaining issues on DRX Huawei, HiSilicon discussion Rel-17 NR\_MBS-Core

[R2-2203121](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203121.zip) CSI and SRS reporting in MBS DRX Xiaomi Communications discussion Rel-17 NR\_MBS-Core

[R2-2203311](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203311.zip) CSI and SRS reporting in MBS DRX ZTE, Sanechips discussion Rel-17 NR\_MBS-Core

* [042] 14 tdocs Noted

CP

[R2-2203780](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203780.zip) [AT117-e][043][MBS] Invited tdocs open Issues CP (Nokia) Nokia discussion Rel-17 NR\_MBS-Core

DISCUSSION

P2

- Clear majority to not change RRC structure.

- Chair wonder if R3 can optimize indep. ZTE clarifies that F1 uses RRC signalling directly. ZTE think R3 is only asking about the RRC structure, and this should not be controversial. ZTE thin R3 is going ahead with the assumption on common signalling.

- Huawei think we then need to have more overhead over Uu, i.e. dedicated configuration requires first the common configuration then + dedicated configuration. Think two separate messages is not good. ZTE think this is just one message, but with common + dedicated IEs.

- Lenovo think that combining common configuration then + dedicated delta configuration is complex when on RRC Uu.

- CMCC think dedicated signalling will have less limitations

- Ericsson think that for the PTM parts there seems no reason that the configuration shall be different between UEs, so for RRC over Uu there shouldn’t be a significant difference for PTM whether configuration is common + dedicated or just dedicated.

P5

- Huawei think that also P4 is needed. Nokia think this would be preferred. CATT also support P4. QC agrees.

- LGE think separate is also supported, and support anyway the range ext

* For P2, RAN2 assumes that if agreed, RRC would still use dedicated UE configuration.

**R2 assumes that the following changes will make it possible for the network to manage MRB IDs and allow per session MRB ID provision:**

* MRB ID can be changed without releasing/adding MRB (delta config).
* Extend MRB ID space beyond current 32 limit and up to 512.

*Offline continuation*

*- Continue offline discussion on P2, clarify the intentions (one/two messages, determine the coverage of the part that could be common = same between UEs).*

*- Send Reply LS asap (offline, Monday)*

* [AT117-e][043][MBS] Invited tdocs open Issues CP (Nokia)

Scope: PH1: Take into account submitted tdocs. Address the questions in R3-221469 LS on NR RRC to support split NR-RAN architecture for NR MBS. Determine agreeable part, pave the way for on-line agreement. CLOSED

PH2: Continue offline discussion on P2, clarify the intentions (one/two messages, determine the coverage of the part that could be common = same between UEs).

Intended outcome: Report

Deadline: PH2 in time for on-line CB W2 Wednesday

[R2-2204062](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204062.zip) [AT117-e][043][MBS] Invited tdocs open Issues CP - PART2 (Nokia) Nokia discussion Rel-17 NR\_MBS-Core

DISCUSSION March 3

- Xiaomi think the restructuring is a lot of work and we may not be able to finish. Samsung agrees.

- MTK think there are no benefits for Uu, think current TS will become more complex.

- CMCC think change may impact Uu performance and thus prefer to not change. Think the RRC overhead will be larger. Huawei agrees, and think Uu impacts are too much.

- Huawei think that indeed Uu overhead will be increased.

- Nokia agrees to significant extent with many comments.

- Ericsson would accept this outcome and think we need to inform R3.

* RAN2 have investigated the topic and decided to not support the Common RRC signalling as requested by RAN3.
* Add the agreement above to the agreeable LS from [067] and the revised LSout is approved unseen, in R2-2204088.
* [AT117-e][067][MBS] Reply LS on NR RRC to support split NR-RAN architecture for NR MBS (Nokia)

Intended outcome: Approved LS out (offline only no CB)

Deadline: VERY SHORT W2 Tuesday 0900 UTC

[R2-2203994](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203994.zip) Reply LS on NR RRC to support split NR-RAN architecture for NR MBS RAN2 LS out

- [067] Chair: LS is agreeable

* Revised, see above

R2-2204088 Reply LS on NR RRC to support split NR-RAN architecture for NR MBS RAN2 LS out

* LS out is approved

[R2-2203226](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203226.zip) Common RRC Structure for MBS Multicast Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_MBS-Core

[R2-2202782](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202782.zip) MRB ID Scope and Uniqueness Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_MBS-Core

[R2-2202267](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202267.zip) Discussion on Questions for Split NR-RAN Architecture from RAN3 LS CATT discussion Rel-17 NR\_MBS-Core

[R2-2202334](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202334.zip) Discussion on MBS split NR-RAN architecture based on RAN3 LS MediaTek inc. discussion Rel-17 NR\_MBS-Core

[R2-2202335](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202335.zip) Draft LS on the support of MBS split NR-RAN architecture MediaTek inc. LS out Rel-17 NR\_MBS-Core To:RAN3

[R2-2202368](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202368.zip) Discussion on LS on NR RRC to support split NR-RAN architecture for NR MBS TD Tech, Chengdu TD Tech discussion Rel-17

[R2-2202426](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202426.zip) Discussion on Supporting split NR-RAN architecture for NR MBS Spreadtrum Communications discussion Rel-17

[R2-2202625](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202625.zip) Discussion on RRC to support split NR-RAN architecture for NR MBS CMCC discussion Rel-17 NR\_MBS-Core

[R2-2202644](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202644.zip) Support of split NR-RAN architecture for NR MBS Intel Corporation discussion Rel-17 NR\_MBS-Core

[R2-2202684](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202684.zip) Discussion on MBS RRC Configuration for Split RAN Samsung discussion Rel-17 NR\_MBS-Core

[R2-2202978](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202978.zip) Discussion on NR RRC to Support Split NR-RAN Architecture for NR MBS vivo discussion Rel-17 NR\_MBS-Core

[R2-2203156](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203156.zip) Discussion on open issues for NR MBS LG Electronics Inc. discussion Rel-17 NR\_MBS-Core

[R2-2203312](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203312.zip) NR RRC to support split NR-RAN architecture for NR MBS ZTE, Sanechips discussion Rel-17 NR\_MBS-Core

[R2-2203345](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203345.zip) Discussion on RRC support of split NR-RAN architecture for NR MBS Huawei, HiSilicon discussion Rel-17 NR\_MBS-Core Late

[R2-2202555](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202555.zip) Support of MBS in MR-DC Apple discussion Rel-17 NR\_MBS-Core

* [043] 15 tdocs Noted

### 8.1.4 UE capabilities

Features / UE caps developed in RAN2. Note that this AI is complementary to AI 8.0.2.

* [AT117-e][044][MBS] UE capabilities (MediaTek)

Scope: Ph1 Collect comments on the initial CRs in [R2-2202786](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202786.zip), [R2-2202787](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202787.zip), as a basis for further updates. Treat [R2-2202269](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202269.zip), [R2-2202671](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202671.zip), [R2-2203118](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203118.zip), [R2-2203120](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203120.zip). Avoid overlap with the other issues discussions. Determine agreeable parts, discussion points etc.

Intended outcome: Report

Deadline: W1 Thursday, for online CB W1 Friday.

CLOSED

[R2-2203775](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203775.zip) Summary for [AT117-e][044][MBS] UE capabilities MediaTek Inc. discussion Rel-17 NR\_MBS-Core

DISCUSSION

P2

- QC think that different UE impl cannot have different capability here. We need to assume some capability. At least some minimum testing configuration.

- Ericsson think the proposal from QC is to have a limit, and think it just adds complexity, the total number of 16 should be the only limit. Huawei agree with Ericsson, think MRB and DRB are similar from capability point of view. Samsung as well.

P4

- Apple wonder if the postponement is for both MCG or SCG.

- MTK think most companies just want to postpone the whole issue.

- Ericsson think that R3 decided not to support this.

- Huawei think MCG can be supported and only SCG is postponed.

- CATT proposes to just capture that MBS on SCG is not supported.

P5

- CATT think that motivation of min number of bcast MRB is needed. SS think this is related to sim number of HARQ process issue.

- QC think UE may not even need a UE cap

* No capability is defined for the number of HARQ process for MBS Broadcast reception
* For MRB for multicast, the earlier agreement that MRB + DRB = 16 applies.
* For MRB for multicast, maxMRB-Add can be used to indicate additional number of MRBs supported by the UE beyond the current limit of MRBs + DRBs = 16 and the maximum value for the additional MRBs can be 16.
* MBS on SCG is not supported (unless the UE can support it without specific DC coordination for Broadcast).
* The UE capability of support of broadcast MRBs, e.g. min number of, is FFS

[R2-2202269](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202269.zip) Discussions on NR MBS UE Capabilities CATT, CBN discussion Rel-17 NR\_MBS-Core

[R2-2202671](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202671.zip) MBS UE capability for supporting Multicast MRBs Qualcomm India Pvt Ltd discussion Rel-17 NR\_MBS\_enh-Core R2-2200531

[R2-2203118](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203118.zip) Remaining issue of MBS UE capability Xiaomi Communications discussion Rel-17 NR\_MBS-Core

[R2-2203120](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203120.zip) Discussion on MBS support on MRDC Xiaomi Communications discussion Rel-17 NR\_MBS-Core R2-2201380

* [044] 4 tdocs noted

### 8.1.5 Other

Issues not covered elsewhere.

#### 8.1.5.1 Control Plane

[R2-2203344](C:\\Users\\mtk65284\\Documents\\3GPP\\tsg_ran\\WG2_RL2\\TSGR2_117-e\\Docs\\R2-2203344.zip" \o "C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203344.zip) Remaining CP open issues Huawei, HiSilicon discussion Rel-17 NR\_MBS-Core Late

[R2-2202243](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202243.zip) Discussion on beam sweeping transmission for MTCH OPPO discussion Rel-17 NR\_MBS-Core

[R2-2202244](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202244.zip) Open issues for broadcast reception over SCell or non-serving Cell OPPO discussion Rel-17 NR\_MBS-Core

[R2-2202270](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202270.zip) Discussion on Other Issues about MBS CATT discussion Rel-17 NR\_MBS-Core

[R2-2202294](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202294.zip) Remaining Open Issues for MBS CP Samsung discussion

[R2-2202332](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202332.zip) MBS Control Plane Issues Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_MBS-Core

[R2-2202336](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202336.zip) Discussion on MBS broadcast reception on SCell and non-serving cell MediaTek Inc. discussion Rel-17 NR\_MBS-Core

R2-2202369 Analysis of MBS reception interruption time during UE mobility in LTE TD Tech, Chengdu TD Tech discussion Rel-17 Withdrawn

[R2-2202370](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202370.zip) Open issues on control plane for broadcast mode TD Tech, Chengdu TD Tech discussion Rel-17

[R2-2202386](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202386.zip) MBS reception interruption problem in LTE and SFN in NR MBS TD Tech, Chengdu TD Tech discussion Rel-17

[R2-2202574](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202574.zip) Discussion multicast service reception in Scell Lenovo, Motorola Mobility discussion Rel-17

[R2-2202753](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202753.zip) Lossless handover for PTM InterDigital, Inc. discussion Rel-17 NR\_MBS-Core

[R2-2202754](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202754.zip) Discussion on PTM activation/deactivation for MBS Interdigital Inc., OPPO, CMCC, ZTE, SJTU, NERCDTV, Lenovo, Motorola Mobility, Spreadtrum, TCL, Xiaomi, MediaTek, Qualcomm, Kyocera, Apple, Sharp, China Unicom, CBN, China Telecom discussion Rel-17 NR\_MBS-Core

[R2-2202875](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202875.zip) NR MBS UAC enhancement aspects Qualcomm Inc discussion Rel-17 NR\_MBS-Core R2-2200532

[R2-2202909](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202909.zip) Frequency of interest in MBS Interest Indication Kyocera discussion Rel-17

[R2-2202979](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202979.zip) Loss-lee Handover Procedure from MBS-supporting Node to Non-MBS Supporting Node vivo discussion Rel-17 NR\_MBS-Core

[R2-2202980](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202980.zip) Loss-less Handover Procedure between MBS-supporting nodes vivo discussion Rel-17 NR\_MBS-Core

[R2-2203201](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203201.zip) UE based PTM to PTP switch Sony discussion Rel-17 NR\_MBS-Core R2-2200905

[R2-2203313](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203313.zip) Discussion on MBS reception in DC and CA scenarios ZTE, Sanechips discussion Rel-17 NR\_MBS-Core

[R2-2203314](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203314.zip) UE initiated mode switch for Multicast ZTE, Sanechips, Kyocera, InterDigital, CMCC, OPPO, Apple discussion Rel-17 NR\_MBS-Core R2-2201411

[R2-2203349](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203349.zip) MCCH modification period Intel Corporation discussion Rel-17 NR\_MBS-Core

#### 8.1.5.2 User Plane

[R2-2202241](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202241.zip) Discussion on Header Compression for MBS OPPO discussion Rel-17 NR\_MBS-Core

[R2-2202295](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202295.zip) Remaining Open Issues for MBS UP Samsung discussion

[R2-2202331](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202331.zip) MBS User Plane Issues Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_MBS-Core

[R2-2202371](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202371.zip) Open issues on user plane for NR MBS TD Tech, Chengdu TD Tech discussion Rel-17

[R2-2202401](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202401.zip) Discussion on MBS power saving issue Shanghai Jiao Tong University discussion

[R2-2202755](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202755.zip) PDCP status report triggering for MBS mode switching InterDigital, Inc. discussion Rel-17 NR\_MBS-Core

[R2-2203119](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203119.zip) Slow-moving PDCP reception window issue Xiaomi Communications discussion Rel-17 NR\_MBS-Core R2-2201383

## 8.2 MR DC/CA further enhancements

(LTE\_NR\_DC\_enh2-Core; leading WG: RAN2; REL-17; WID: RP-201040)

Time budget: 1 TU

Tdoc Limitation: 5 tdocs

No documents should be submitted to 8.2. Please submit to.8.2.x

Contributions should illustrate the Stage-3 details of the proposals (e.g. in an Annex containing TP against the running CRs). If a contribution does not provide TP, it may be deprioritized.

Contributions should focus on remaining open issues needed to close the WI from RAN2 perspective (e.g. as discussed in [201])

### 8.2.1 Organizational, Requirements and Scope

Including LSs, any rapporteur inputs and results of the (informative) running CR email discussions [210]-[215]

Including rapporteur input on remaining open issues needed to close the WI.

[R2-2202129](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202129.zip) Reply LS on inter-MN RRC resume without SN change (R3-221290; contact: Ericsson) RAN3 LS in Rel-17 To:RAN2

[R2-2202170](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202170.zip) LS on Measurement requirement for deactivated SCG (R4-2202781; contact: Ericsson) RAN4 LS in Rel-17 To:RAN2

[R2-2202481](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202481.zip) Draft 331 CR for DCCA UE capabilities Intel Corporation draftCR Rel-17 38.331 16.7.0 B LTE\_NR\_DC\_enh2-Core

[R2-2202482](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202482.zip) Draft 306 CR for DCCA UE capabilities Intel Corporation draftCR Rel-17 38.306 16.7.0 B LTE\_NR\_DC\_enh2-Core

[R2-2202651](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202651.zip) Introduction of SCG activation and deactivation ZTE Corporation, Sanechips CR Rel-17 37.340 16.8.0 0293 - B LTE\_NR\_DC\_enh2-Core

R2-2202794 Introduction of SCG activation and deactivation vivo CR Rel-17 38.321 16.7.0 1203 - B LTE\_NR\_DC\_enh2-Core Late

[R2-2203094](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203094.zip) Introduction of CPA and inter-SN CPC CATT CATT CR Rel-17 37.340 16.8.0 0297 - B LTE\_NR\_DC\_enh2-Core

[R2-2203095](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203095.zip) Introduction of CPA and inter-SN CPC CATT CATT CR Rel-17 38.331 16.7.0 2926 - B LTE\_NR\_DC\_enh2-Core

[R2-2203096](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203096.zip) Introduction of CPA and inter-SN CPC CATT CATT CR Rel-17 36.331 16.7.0 4770 - B LTE\_NR\_DC\_enh2-Core

[R2-2203195](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203195.zip) Introduction of eCADC vivo CR Rel-17 38.321 16.7.0 1210 - B LTE\_NR\_DC\_enh2-Core

[R2-2203370](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203370.zip) Introduction of efficient SCG activation/deactivation Huawei, HiSilicon draftCR Rel-17 36.331 16.7.0 LTE\_NR\_DC\_enh2-Core

[R2-2203371](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203371.zip) Introduction of efficient SCG activation/deactivation Huawei, HiSilicon draftCR Rel-17 38.331 16.7.0 LTE\_NR\_DC\_enh2-Core

[R2-2203372](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203372.zip) Introduction of further multi-RAT dual-connectivity enhancements Huawei, HiSilicon CR Rel-17 36.331 16.7.0 4774 - B LTE\_NR\_DC\_enh2-Core

R2-2203373 Introduction of further multi-RAT dual-connectivity enhancements Huawei, HiSilicon CR Rel-17 38.331 16.7.0 2954 - B LTE\_NR\_DC\_enh2-Core Late

[R2-2203389](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203389.zip) Discussion on the LS from RAN4 on measurement requirements Ericsson discussion LTE\_NR\_DC\_enh2-Core

### 8.2.2 Efficient activation / deactivation mechanism for one SCG and SCells

No documents should be submitted to 8.2.2. Please submit to.8.2.2.x

#### 8.2.2.1 UE behaviour while SCG is deactivated

This agenda item may use a summary document (decision to be made based on submitted tdocs) focusing on essential open issues in UE behaviour while SCG is deactivated (as per open issue list).

Including discussion on UE behaviour while SCG is deactivated (e.g. TA timer and RLM/BFD, MCG power limitation and PDCCH blind decoding limitations)

[Pre117-e][220][DCCA] Summary of UE behaviour while SCG is deactivated (Huawei)

Scope: Provide summary of UE behaviour while SCG is deactivated according to open issue list.

Intended outcome: Discussion summary in R2-220xxxx.

Deadline: TBD

[R2-2202248](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202248.zip) How to model the PSCell in SCG deactivation? OPPO discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202250](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202250.zip) SCG deactivation indication when resuming from RRC\_INACTIVE due to MO data OPPO discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202280](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202280.zip) QoS flow remapping during SCG deactivation Fujitsu discussion Rel-17 LTE\_NR\_DC\_enh2-Core R2-2200308

[R2-2202575](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202575.zip) Discussion on UE behavior with SCG deactivated Lenovo, Motorola Mobility discussion Rel-17

[R2-2202649](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202649.zip) Discussion on UE behaviour when SCG is deactivated ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202679](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202679.zip) Views on several issues Samsung Electronics discussion LTE\_NR\_DC\_enh2-Core

[R2-2202680](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202680.zip) DC power sharing for deactivated SCG Samsung Electronics discussion LTE\_NR\_DC\_enh2-Core R2-2200583

[R2-2202705](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202705.zip) UE behaviour while SCG is deactivated Qualcomm Incorporated discussion Rel-17

[R2-2202756](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202756.zip) UE behavior while the SCG is deactivated InterDigital, Inc. discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202767](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202767.zip) Deactivation of SCG LG Electronics Finland discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202795](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202795.zip) Discussion on UE behaviour while SCG is deactivated vivo discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202919](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202919.zip) TA timer and RLM/BFD while the SCG is deactivated MediaTek Inc. discussion

[R2-2203097](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203097.zip) Discussions on UE Behavior in Deactivated SCG CATT discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2203176](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203176.zip) Open Issues on UE Behavior NTT DOCOMO INC. discussion Rel-17

[R2-2203184](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203184.zip) UE behaviour while SCG is deactivated Nokia, Nokia Shanghai Bell discussion Rel-17 LTE\_NR\_DC\_enh2-Core Late

[R2-2203374](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203374.zip) [Pre117-e][220][DCCA] Summary of UE behaviour while SCG is deactivated (Huawei) Huawei, HiSilicon discussion Rel-17 LTE\_NR\_DC\_enh2-Core Late

[R2-2203375](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203375.zip) Open issues on UE behaviours while the SCG is deactivated Huawei, HiSilicon discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2203390](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203390.zip) UE behaviour while SCG is deactivated Ericsson discussion LTE\_NR\_DC\_enh2-Core

#### 8.2.2.2 Actions at SCG activation and deactivation

Including discussion on actions that occur at SCG activation or deactivation (e.g. UL split bearer handling, MAC actions, BWP used when SCG (de)activation is triggered)

[R2-2202247](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202247.zip) L2 based SCG activation and SCG RRM OPPO discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202281](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202281.zip) Proposal for releasing statusReportRequired for SCG bearers at SCG deactivation Fujitsu discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202282](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202282.zip) Remaining issues on UL data arrival for SCG Fujitsu discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202351](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202351.zip) Futher discussion on actions at SCG activation or deactivation Transsion Holdings discussion Rel-17

[R2-2202413](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202413.zip) Discussion on activation and deactivation of SCG Spreadtrum Communications discussion Rel-17

[R2-2202576](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202576.zip) MAC related issues upon SCG activation and deactivation Lenovo, Motorola Mobility discussion Rel-17

[R2-2202650](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202650.zip) Activation of deactivated SCG ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202701](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202701.zip) Actions at SCG activation and deactivation Qualcomm Incorporated discussion Rel-17

[R2-2202757](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202757.zip) Deactivation of SCG InterDigital, Inc. discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202758](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202758.zip) Activation of SCG InterDigital, Inc. discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202796](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202796.zip) Discussion on actions at SCG activation and deactivation vivo discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202809](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202809.zip) Remaining issues on SCG deactivation NEC discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2203039](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203039.zip) Remaining issues for MAC procedure in deactivated SCG SHARP Corporation discussion Rel-17 LTE\_NR\_DC\_enh2-Core R2-2201319

[R2-2203061](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203061.zip) split bearer handling upon SCG deactivation Sharp discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2203087](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203087.zip) Open issues on SCG deactivation DENSO CORPORATION discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2203092](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203092.zip) Discussion on partial MAC reset upon SCG deactivation LG Electronics Inc. discussion LTE\_NR\_DC\_enh2-Core

[R2-2203098](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203098.zip) Remaining Issues on Actions at SCG Activation and Deactivation CATT discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2203099](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203099.zip) Discussion on RRC Aspects of SCG Deactivation CATT discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2203166](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203166.zip) Discussion on data transmission to MN for split bearer LG Electronics Inc. discussion LTE\_NR\_DC\_enh2-Core

[R2-2203177](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203177.zip) Open Issues on SCG Activation and Deactivation NTT DOCOMO INC. discussion Rel-17

[R2-2203185](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203185.zip) UL data handling at SCG deactivation Nokia, Nokia Shanghai Bell discussion Rel-17 LTE\_NR\_DC\_enh2-Core Late

[R2-2203186](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203186.zip) Actions at SCG activation and deactivation Nokia, Nokia Shanghai Bell discussion Rel-17 LTE\_NR\_DC\_enh2-Core Late

[R2-2203376](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203376.zip) Handling of uplink split bearers and BWP when the SCG deactivated Huawei, HiSilicon discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2203377](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203377.zip) MAC CE based SCG activation Huawei, HiSilicon discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2203378](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203378.zip) Draft Reply LS on efficient activation de-activation mechanism for one SCG Huawei, HiSilicon LS out Rel-17 LTE\_NR\_DC\_enh2-Core To:RAN4

[R2-2203391](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203391.zip) Actions at SCG activation and deactivation Ericsson discussion LTE\_NR\_DC\_enh2-Core

[R2-2203414](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203414.zip) Remaining Issues related to SCG Activation LG Electronics discussion Rel-17 LTE\_NR\_DC\_enh2-Core

#### 8.2.2.3 Other aspects of SCG activation/deactivation

Including essential parts of SCG activation/deactivation that do not fit under other AIs. For any proposals provided in this AI, TPs are required to be provided to illustrate the necessity and impacts of the topic. Proposals that do not provide Stage-3 details will not be treated.

This agenda item may be deprioritized in this meeting .

[R2-2202249](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202249.zip) Fast MCG recovery via deactivated SCG OPPO discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202531](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202531.zip) CR TP for 38.331 on MCG Failure Recovery in deactivated SCG Apple, Vivo, ZTE Corporation, LG Electronics, NTT DOCOMO, Inc. discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202532](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202532.zip) CR TP for 36.331 on MCG Failure Recovery in deactivated SCG Apple, Vivo, ZTE Corporation, LG Electronics, NTT DOCOMO, Inc. discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202533](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202533.zip) CR TP for 38.321 on MCG Failure Recovery in deactivated SCG Apple, Vivo, ZTE Corporation, NTT DOCOMO, Inc. discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202703](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202703.zip) Other aspects of SCG activation and deactivation Qualcomm Incorporated discussion Rel-17

[R2-2202780](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202780.zip) Open issues on UE-requested SCG (de)activation CMCC discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202800](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202800.zip) Discussion on MCG failure recovery via deactivated SCG Futurewei discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202923](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202923.zip) Further discussion on TCI State indication in RRC MediaTek Inc. discussion R2-2201295

[R2-2203040](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203040.zip) Remaining issues for RRM measurement in deactivated SCG SHARP Corporation discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2203062](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203062.zip) Fast MCG link recovery via deactivated SCG Sharp discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2203085](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203085.zip) Consideration on MCG link recovery with deactivated SCG CMCC discussion Rel-17 LTE\_NR\_DC\_enh2-Core

### 8.2.3 Conditional PSCell change / addition

No documents should be submitted to 8.2.3. Please submit to.8.2.3.x

#### 8.2.3.1 CPAC procedures from network perspective

Including discussion on network aspects of CPAC (e.g. inter-node messages, coexistence of Rel-16 and Rel-17 procedures)

[R2-2202304](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202304.zip) Discussion on CPAC procedures from NW perspective vivo discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202468](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202468.zip) Open issues on Rel-17 CPAC procedures from NW perspective Nokia, Nokia Shanghai Bell discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202577](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202577.zip) On support of CPAC replace Lenovo, Motorola Mobility discussion Rel-17

[R2-2202702](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202702.zip) CPAC procedures from network perspective Qualcomm Incorporated discussion Rel-17

[R2-2202824](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202824.zip) Remaining issues on CPAC from NW perspective ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202914](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202914.zip) Discussion on the CG-CandidateList Google Inc. discussion LTE\_NR\_DC\_enh2-Core R2-2200361

[R2-2202916](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202916.zip) Support modification and cancellation of C-PSCells in the CG-CandidateList Google Inc. draftCR Rel-17 38.331 16.7.0 B LTE\_NR\_DC\_enh2-Core R2-2200362

[R2-2203045](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203045.zip) Discussion on support for coexistence of Rel-16 and Rel-17 CPC NTT DOCOMO INC. discussion

[R2-2203100](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203100.zip) Remaining issues on CPAC from NW perspective CATT discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2203170](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203170.zip) Remaining issues for CPAC in network perspective Samsung R&D Institute UK discussion

[R2-2203432](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203432.zip) CPAC network procedures Ericsson discussion Rel-17 LTE\_NR\_DC\_enh2-Core

#### 8.2.3.2 CPAC procedures from UE perspective

Including discussion on relation with deactivated SCG (e.g. is CPC triggered even if the SCG is deactivated SCG, can the CPC command include deactivated SCG, maximum number of CPC configurations, unsynchronized update of MCG configuration at CPC execution, full configuration changes)

[R2-2202305](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202305.zip) Discussion on CPAC procedures from UE perspective vivo discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202469](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202469.zip) Open issues on Rel-17 CPAC procedures from UE perspective Nokia, Nokia Shanghai Bell discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202516](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202516.zip) Text proposal to Uu siganling in CPAC Apple discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202578](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202578.zip) Discussion on CPAC with deactivated SCG Lenovo, Motorola Mobility discussion Rel-17

[R2-2202777](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202777.zip) Discussion on CPAC related open issues LG Electronics discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202825](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202825.zip) Remaining issues on CPAC from UE perspective ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202924](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202924.zip) Discussion on UE behaviour upon CPC execution MediaTek Inc. discussion

[R2-2203101](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203101.zip) Remaining issues on CPAC from UE perspective CATT discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2203171](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203171.zip) Remaining issues for CPAC in UE perspective Samsung R&D Institute UK discussion

[R2-2203379](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203379.zip) Remaining issues for CPAC Huawei, HiSilicon discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2203433](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203433.zip) UE procedures and signalling for CPAC Ericsson discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2203476](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203476.zip) CPC and SCG deactivation Sharp discussion Rel-17 LTE\_NR\_DC\_enh2-Core

#### 8.2.3.3 Other CPAC aspects

Including essential parts of CPAC that do not fit under other AIs. For any proposals provided in this AI, TPs are required to be provided to illustrate the necessity and impacts of the topic. Proposals that do not provide Stage-3 details will not be treated.

This agenda item may be deprioritized in this meeting .

[R2-2202579](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202579.zip) Coexistence of CHO and CPAC Lenovo, Motorola Mobility discussion Rel-17

[R2-2202759](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202759.zip) Coexistence of CHO and CPC InterDigital, Nokia, Nokia Shanghai Bell discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202760](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202760.zip) SCG failure recovery with CPAC InterDigital, Inc. discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202826](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202826.zip) Discussion on coexistence of CHO and CPAC ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_DC\_enh2-Core

### 8.2.4 Temporary RS for SCell activation

Including discussion on any essential aspects that were not yet covered by endorsed CRs

This agenda item may be deprioritized in this meeting.

[R2-2202251](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202251.zip) TP correction for TRS ID in 38321 OPPO discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202252](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202252.zip) Introduction of TRS based SCell activation in 38.321 OPPO CR Rel-17 38.321 16.7.0 1185 - B LTE\_NR\_DC\_enh2-Core

[R2-2202253](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202253.zip) Introduction of TRS based SCell activation in 38.331 OPPO CR Rel-17 38.331 16.7.0 2882 - B LTE\_NR\_DC\_enh2-Core

[R2-2202681](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202681.zip) Leftover issues for TRS based SCell activation Samsung Electronics discussion LTE\_NR\_DC\_enh2-Core

[R2-2202797](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202797.zip) Discussion on Temporary RS activation for fast SCell activation vivo discussion Rel-17 LTE\_NR\_DC\_enh2-Core

### 8.2.5 UE capabilities

Including finalization of RAN2 feature list input on SCG deactivation, CPAC and efficient SCell activation needed to create UE capability CRs.

If changes are proposed against the baseline endorsed in previous meeting, the proposals should illustrate the differences to the baseline illustrated in R2-2109676.

[R2-2202480](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202480.zip) Discussion on remaining issues on DCCA UE capabilities Intel Corporation discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202483](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202483.zip) CR TP for 38.331 on DCCA UE capabilities Intel Corporation discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202484](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202484.zip) CR TP for 38.306 on DCCA UE capabilities Intel Corporation discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202485](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202485.zip) CR TP for 36.331 on DCCA UE capabilities Intel Corporation discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2202486](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202486.zip) CR TP for 36.306 on DCCA UE capabilities Intel Corporation discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2203380](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203380.zip) UE capability for CPAC and SCG (de)activation Huawei, HiSilicon discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2203392](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203392.zip) UE capabilities for Rel-17 MR-DC enhancements Ericsson discussion LTE\_NR\_DC\_enh2-Core

## 8.3 Multi SIM

(LTE\_NR\_MUSIM-Core; leading WG: RAN2; REL-17; WID: RP-212610)

Time budget: 1 TU

Tdoc Limitation: 3 tdocs

Contributions should illustrate the Stage-3 details of the proposals (e.g. in an Annex containing TP against the running CRs). If a contribution does not provide TP, it may be deprioritized.

Contributions should focus on remaining open issues needed to close the WI from RAN2 perspective (e.g. as discussed in [202])

### 8.3.1 Organizational, Requirements and Scope

Including LSs, any rapporteur inputs and results of the (informative) running CR email discussions [235]-[239]

[R2-2202696](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202696.zip) Introduction of MUSIM UE Capabilities Huawei, HiSilicon CR Rel-17 38.331 16.7.0 2875 1 B LTE\_NR\_MUSIM-Core R2-2202009

[R2-2202697](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202697.zip) Introduction of MUSIM UE Capabilities Huawei, HiSilicon CR Rel-17 38.306 16.7.0 0672 1 B LTE\_NR\_MUSIM-Core R2-2202010

[R2-2202962](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202962.zip) Capture RAN2 agreements on RRC for MUSIM vivo(Rapporteur) CR Rel-17 38.331 16.7.0 2919 - B LTE\_NR\_MUSIM-Core

[R2-2202963](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202963.zip) [Post116bis-e][202][MUSIM] Open issues for MUSIM (vivo) vivo discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2203013](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203013.zip) Introduction of MUSIM for LTE Samsung Electronics Co., Ltd CR Rel-17 36.331 16.7.0 4769 - B LTE\_NR\_MUSIM-Core

[R2-2203273](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203273.zip) Introduction of Multi-USIM devices to 36.304 China Telecommunications CR Rel-17 36.304 16.6.0 0842 - B LTE\_NR\_MUSIM, LTE\_NR\_MUSIM-Core R2-2201697

[R2-2203436](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203436.zip) Running CR to 38300 for Multi-USIM devices support Ericsson CR Rel-17 38.300 16.8.0 0422 - B LTE\_NR\_MUSIM-Core

[R2-2203437](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203437.zip) Running CR to 36300 for Multi-USIM devices support Ericsson CR Rel-17 36.300 16.7.0 1355 - B LTE\_NR\_MUSIM-Core

### 8.3.2 Paging collision avoidance

This agenda item will be deprioritized in this meeting unless additional feedback from SA2/CT1 is received. Proposals that do not provide Stage-3 details will not be treated.

### 8.3.3 UE notification on network switching for multi-SIM

Including discussion on NW switching for multi-SIM with leaving from and staying in RRC\_CONNECTED

This agenda item may use a summary document (decision to be made based on submitted tdocs) considering stage-3 details of MUSIM (including UAI, gap configuration and NW switching with leaving RRC\_CONNECTED)

[Pre117-e][230][MUSIM] Summary Stage-3 details of MUSIM (vivo)

Scope: Provide summary of Stage-3 aspects of MUSIM configuration according to open issue list.

Intended outcome: Summary document in R2-220xxxx.

Deadline: TBD

[R2-2202206](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202206.zip) Remaining Key Issues for MUSIM Gap OPPO discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2202207](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202207.zip) Remaining Key Issues for Leaving Connected Mode OPPO discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2202240](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202240.zip) Finalizing NW switching with leaving from RRC\_CONNECTED Samsung Electronics Co., Ltd discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2202254](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202254.zip) Discussion on UE requested MUSIM gap release Samsung Electronics Co., Ltd discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2202419](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202419.zip) Remaining issues about UE indication on switching Spreadtrum Communications discussion Rel-17

[R2-2202517](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202517.zip) Open Issues in MUSIM Network Switching Apple discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2202518](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202518.zip) Miscellaneous Issues in MUSIM Apple discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2202573](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202573.zip) Remaining issues for switching notification and busy indication Lenovo, Motorola Mobility discussion Rel-17

[R2-2202645](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202645.zip) Open issues on Network switching and Gap release signalling Intel Corporation discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2202698](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202698.zip) Remaining issues for NW switching without leaving RRC\_CONNECTED Huawei, HiSilicon discussion Rel-17

[R2-2202699](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202699.zip) Remaining issues for NW switching with leaving RRC\_CONNECTED Huawei, HiSilicon discussion Rel-17

[R2-2202740](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202740.zip) On remaining issues for MUSIM Gap configuration Nokia, Nokia Shanghai Bells discussion Rel-17

[R2-2202741](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202741.zip) On remaining issues for switching notification for leaving RRC connection Nokia, Nokia Shanghai Bells discussion Rel-17

[R2-2202768](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202768.zip) RRC Connection release request procedure for MUSIM and power saving Sharp discussion R2-2201216

[R2-2202770](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202770.zip) Stop using of MUSIM Gap requested to be released Sharp discussion

[R2-2202833](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202833.zip) Remaining issues of Network switching for MUSIM China Telecom discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2202844](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202844.zip) Interaction between NAS and AS for network switching ASUSTeK discussion Rel-17 36.304 LTE\_NR\_MUSIM-Core

[R2-2202845](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202845.zip) Configured time for network switching ASUSTeK discussion Rel-17 38.331 LTE\_NR\_MUSIM-Core

[R2-2202856](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202856.zip) Remaining issues on MUSIM gap configuration LG Electronics discussion Rel-17 LTE\_NR\_MUSIM-Core Withdrawn

[R2-2202880](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202880.zip) Consideration on the Remaining Issues of the Scheduling Gap ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2202925](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202925.zip) Remaining issue for NW switching with leaving RRC\_CONNECTED MediaTek Inc. discussion

[R2-2202938](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202938.zip) Remain issues for network switching with leaving RRC\_CONNECTED SHARP Corporation discussion R2-2201228

[R2-2202964](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202964.zip) Remaining issue on network switching vivo discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2203227](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203227.zip) Remaining issues on MUSIM gap configuration LG Electronics France discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2203415](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203415.zip) Remaining Issues on Switching with RRC Release LG Electronics discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2203416](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203416.zip) Considerations on Busy Indication LG Electronics discussion Rel-17 LTE\_NR\_MUSIM-Core R2-2201577

[R2-2203434](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203434.zip) Remaining discussion on switchover procedures Ericsson discussion

[R2-2203440](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203440.zip) Corrections to the NR RRC CR for MUSIM (38.331) Ericsson draftCR Rel-17 38.331 16.7.0 F LTE\_NR\_MUSIM-Core

### 8.3.4 Paging with service indication

This agenda item will be deprioritized in this meeting unless additional feedback from SA2/CT1 is received. Proposals that do not provide Stage-3 details will not be treated.

[R2-2202239](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202239.zip) Clarification on UE behavior for NAS-based busy indication in RRC\_INACTIVE Samsung Electronics Co., Ltd discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2202965](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202965.zip) Remaining issue on paging cause feature vivo discussion Rel-17 LTE\_NR\_MUSIM-Core

### 8.3.5 UE capabilities and other aspects

Including finalization of RAN2 feature list input on MUSIM and remaining details needed to create UE capability CRs.

Including discussion on essential aspects of MUSIM that need to be resolved during Rel-17 but are not covered by other agenda items.

If changes are proposed against the baseline endorsed in previous meeting, the proposals should illustrate the differences to the baseline illustrated in R2-2109625.

[R2-2202646](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202646.zip) MUSIM remaining issue on gap capability signalling Intel Corporation discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2202700](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202700.zip) Remaining issues for MUSIM UE Capabilities Huawei, HiSilicon discussion Rel-17

[R2-2202752](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202752.zip) Discussion on MUSIM band conflict scenarios Nokia, Nokia Shanghai Bell discussion Rel-17

[R2-2202885](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202885.zip) Consideration on the MUSIM UE capability reporting ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2202893](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202893.zip) Consideration on the band collision issue ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2202936](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202936.zip) UE Capabilities for MUSIM Gap Pattern OPPO discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2202966](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202966.zip) Remaining issue on UE capabilities vivo discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2203435](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203435.zip) Remaining aspects on UE capabilities for Multi-USIM and other issues Ericsson discussion

## 8.4 NR IAB enhancements

(NR\_IAB\_enh-Core; leading WG: RAN2; REL-17; WID: RP-211548)

Time budget: 1 TU

Tdoc Limitation: 3 tdocs

RP 92e: DAPS-like solutions to be deprioritized.

RP 93e: Enhancements to improve topology-wide fairness and multi-hop latency to be deprioritized. RAN2-led efforts on enhancements to LCG-range extension, RLF indications and local rerouting to continue.

* NR\_IAB\_enh-Core WI can be closed from R2 progress point of view (remaining FFS are considered as recommended corrections).

### 8.4.1 General

#### 8.4.1.1 Organizational

Tdoc Limitation: 0

Planning etc

[R2-2202327](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202327.zip) Updated Rel-17 IAB Workplan Qualcomm Incorporated, Samsung (WI rapporteurs) Work Plan Rel-17 NR\_IAB\_enh R2-2200194

- QC indicate that there is a LS from R1 on MAC CEs expected early next week.

* Noted

#### 8.4.1.2 LS in

Tdoc Limitation: 0

LS in. For LSes that need action or has impact beyond taking into account by CR rapporteurs: One tdoc by contact company (one company) to address the LS and potential reply is considered Rapporteur Input and may be provided.

[R2-2202172](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202172.zip) LS on range of power control parameters for eIAB (R4-2203020; contact: Samsung) RAN4 LS in Rel-17 To:RAN1 Cc:RAN2

* Noted

[R2-2204012](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204012.zip) LS on upper layers parameters for Rel-17 eIAB (R1-2202737; contact: Qualcomm) RAN1 LS in Rel-17 NR\_IAB\_enh To:RAN2, RAN3 Cc:RAN4

#### 8.4.1.3 CRs and Rapporteur Resolutions

Tdoc Limitation: 0.

CR Rapporteurs to provide running CRs, potentially updated, and provide resolution proposals to Rapporteur Handled Open Issues, See also R2-2202050

[Stage-2 OIs: Update with latest agreements, and address of ALL editor’s Notes]

[BAP OIs: Aspects BAP#5, BAP#6, BAP#7, BAP#9].

* [Post117-e][014][eIAB] 38321 CR (Samsung)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][021][eIAB] 38340 CR (Huawei)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][094][eIAB] 38300 CR (Qualcomm)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][095][eIAB] 38331 CR (Ericsson)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][096][eIAB] 37340 CR (vivo)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][097][eIAB] UE capabilties (Intel)

Scope: Reflect progress including R2 117-e. CR endorsement

Intended outcome: Endorsed CRs for merge (306 and 331)

Deadline: Extra Short

R2-2204093 Summary of discussion [AT117-e][014][eIAB] MAC (Samsung) Samsung (rapporteur) discussion Rel-17 NR\_IAB\_enh-Core

[R2-2202328](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202328.zip) Running CR to TS 38.300 for eIAB Qualcomm Incorporated discussion Rel-17 NR\_IAB\_enh R2-2111450

[R2-2202372](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202372.zip) Running CR of TS 38.340 for eIAB Huawei, HiSilicon CR Rel-17 38.340 16.5.0 0020 - B NR\_IAB\_enh-Core

[R2-2203276](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203276.zip) Running CR to 38.321 on Integrated Access and Backhaul for NR Rel-17 Samsung Electronics GmbH CR Rel-17 38.321 16.7.0 1171 4 B NR\_IAB\_enh-Core R2-2201984

=> Revised in R2-2204092

R2-2204092 Running CR to 38.321 on Integrated Access and Backhaul for NR Rel-17 Samsung Electronics GmbH CR Rel-17 38.321 16.7.0 1171 5 B NR\_IAB\_enh-Core

[R2-2203471](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203471.zip) Enhancements to Integrated Access and Backhaul for NR Ericsson CR Rel-17 38.331 16.7.0 2811 4 B NR\_IAB\_enh-Core R2-2201993

[R2-2202967](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202967.zip) Capture RAN2 agreements on CP-UP separation support in NR eIAB vivo(Rapporteur) CR Rel-17 37.340 16.8.0 0296 - B NR\_IAB-Core

[R2-2202373](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202373.zip) Resolution proposals to Rapporteur Handled Open Issues BAP#5,6,7,9 Huawei, HiSilicon discussion Rel-17 NR\_IAB\_enh-Core

* [021] Noted

### 8.4.3 Open Issues

#### 8.4.3.1 Pre-discussions

Tdoc Limitation: 0.

Pre117-e discussions to gather company input on specific Open Issues, see R2-2202050:

- MAC CE for beam indication signaling (as proposed by RAN1)

- Remaining Issues on RLF indication not related to BAP#6, BAP#7 BAP#9 (focus Stage 3). Including input on BAP#8

- RAN3’s working assumption on Solution 1 for latency reduction of intra-donor topology adaptation. Identification of potential obstacles and how to overcome them.

- UE capabilities for the IAB-MT’s inter-CU HO and NR DC

- RRC: Remaining aspects of CP-UP separation (focus Stage 3).

Companies to provide input into the following discussion:

[Pre117-e][003][eIAB] eIAB Open Issues Input (Qualcomm)

[Pre117-e][014][eIAB] eIAB MAC Open Issues Input (Samsung)

[R2-2202329](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202329.zip) [Pre117-e][003][eIAB] eIAB Open Issues Input Qualcomm Incorporated (Rapporteur) discussion Rel-17 NR\_IAB\_enh

DISCUSSION

- Ericsson think we don’t need to allow propagation at all

- LG think the proposal (below) allows dual connected nodes to send typ2 indication to trigger child node re-routing unnecessarily.

* Type-2/3 indication MAY be propagated, if the situation in the node doing the propagation is such that all BAP links are affected by the condition (e.g. single connected) (additional decision if to propagate or not can be left for implementation).
* Type-2/3 indication is not propagated if the situation in the node doing the propagation is such that some BAP links are un-affected by the condition (e.g. dual connected).
* For the 2 above agreements, no stage-3 impact is foreseen.
* For Type-2/3 indication in any case there is no routing information included.
* The Rel-16 term “BH RLF indication” is used for type-4 indication in Rel-17.
* [AT117-e][003][eIAB] Open Issues (Qualcomm)

Scope: Based on [R2-2202329](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202329.zip), progress remaining proposals. Determine agreeable parts, points for discussion if needed, open issues if needed. Aim for offline agreement, if not possible then pave the way for efficient on-line.

Intended outcome: Report

Deadline: In time for on-line CB W2 Wednesday

[R2-2203961](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203961.zip) [AT117-e][003][eIAB] Open Issues (Qualcomm) Qualcomm (Rapporteur) discussion Rel-17 NR\_IAB\_enh-Core

DISCUSSION March 2

P1

- QC think t3 can be sent and this is already clear from stage 2. LGE think we need to remove things from the Stage-2 CR. Nokia also wonder what is the impact, think we need consistency between stage 2 and stage 3, think current Stage 2 is ok. IDT wonder what is the relation.

* Clarification: Successful CHO triggered by RLF is a triggering condition for type-3 indication (in addition to legacy reestablishment). This is already sufficiently covered by existing Stage-2 text.
* RAN2 does not have specific concerns about RAN3’s WA that upon migration/HO failure, the buffered RRC message is still transferred to the child node.
* RAN2 agrees with RAN3 that RAN3’s solution 1 for latency reduction should not be applied for CHO.

[R2-2203278](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203278.zip) Summary of discussion [Pre117-e][014][eIAB] eIAB MAC Open Issues Input (Samsung) Samsung Electronics GmbH report Late

DISCUSSION

- Samsung explain that the CR already implements 9, 10, 11

P8

- LG think O1 has an issue. Bitmap isn’t truncated, and bitmap is now extended. Think the O1 doesn’t work. O3 has functional issues. O2 is the only clear and workable option. ZTE prefer O2, don’t want to have new format for padding BSR. Nokia doesn’t have strong opinion but think O2 is simpler and there is no need to optimize padding BSR. Apple prefer O2 but could tolerate also O3. Intel prefer O2.

- Ericsson think O2 involves loss of info. O3 is more flexible and can use the remaining space better. Samsung agrees with Ericsson. Huawei think Q3 refers to legacy format, no strong opinion. Vivo agrees O3 is better as less info is lost. LG think O3 is a new format.

- Chair asks if we can go with O2.

* Align terminology with RAN1: use Toffset,2 as the designation for the content of the Case-7 timing offset MAC CE (instead of the currently used Tdelta\_Case7).
* Rename this MAC CE to “Case-7 timing advance offset MAC CE” and have it in a separate clause 6.1.3.y, thereby reverting the clause 6.1.3.21 to its original content.
* Keep the description of both MAC CEs (Timing Delta MAC CE, and the Case-7 timing offset MAC CE) in the same clause (5.18.18).
* (O2) For the case of Padding BSR when logicalChannelGroup-IABExt-r17 is configured, Report Extended Short Truncated BSR in lieu of Extended Long Truncated BSR, if the number of padding bits cannot include the fixed size of 256 LCGi plus subheader of the Extended Long Truncated BSR;
* [AT117-e][014][eIAB] MAC (Samsung)

Scope: Wait for RAN1 LS, kick off discussion when received. Based RAN1 LS and [R2-2203278](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203278.zip), progress remaining proposals (on MAC CEs). Determine agreeable parts, points for discussion if needed, open issues if needed. Aim for offline agreement, if not possible then pave the way for efficient on-line. This discussion will continue as post meeting discussion for MAC CR, and updated MAC CR (taking into acc this meetings agreements) can also be reviewed as part of this discussion.

Intended outcome: Report (assume that CR revision is not needed for CB).

Deadline: In time for on-line CB W2 Wednesday

DISCUSSION March 2

- Samsung hopes that discussion on R1 related impact can converge quickly. Collect comments until EOM in this discussion and this will be the basis of CR.

- QC think there are also RRC impacts and think R1 is discussing further and will send additional LS. QC think MAC CE impacts is an immature topic and suggest to postpone. Propose to treat any Late additional LS (tomorrow or later) in May meeting. Samsung think we can progress some MAC CEs.

Chair: We don’t expect to come back online. Please assess the maturity (per item, per MAC CE etc), and the CR rapporteur can decide if to attempt to cover it now or if to postpone. Same for RRC.

#### 8.4.3.2 Invited Input

Company input on the following Open Issues, See R2-2202050:

- BAP re-writing mapping configurations for UL inter-donor-DU re-routing, including include option a to d (identified in [Post116bis-e][079]).

- Aspects BAP#1, BAP#4, BAP#2, BAP#3 (identified in [Post116bis-e][078]).

[R2-2203527](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203527.zip) Report of [Pre117-e][021][eIAB] AI summary of 8.4.3.2 Invited Input Huawei, HiSilicon

DISCUSSION

P1

- Chair wonder if wildcard is part of a, i.e. to wildcard path IDs for ingress? Huawei think maybe, QC think no.

- Nokia think BAP address should be supported.

- ZTE think c is acceptable, a works, b is not good as all packets would be delivered for a single path potentially causing congestion.

- LG think a is based on re-routing configuration, c is based on the normal routing table. B only has one entry, it should be possible to have different routes based on QoS for example. Vivo agrees, and think a is better. Samsung think this is not the case, QoS is not relevant.

- Ericsson think a is more general as it handles all cases, but think also c is a possible way. b is workable. Intel agrees that a is more general and can be used for both inter and intra scenarios, and think also c can be a backup.

- Lenovo think a can be the baseline, but c can be allowed as a backup.

- Huawei think a is the way to go

- QC think a has the issue that we need specific indicator separating intra and inter top cases. Ericsson think also C could work.

P2

- QC think this proposal is not needed for C

P4

- Samsung wonder if this is really majority view. Has concerns.

* We go with Option c (if we find that some config is needed we include also Option b), where Option c = Rewriting mapping for inter-donor-DU re-routing is based on the BAP routing IDs included in the routing entries configured for each parent, and Option b = Rewriting mapping for inter-donor-DU re-routing is based on a default egress BAP routing ID(s) configured for each parent link.
* [AT117-e][021][eIAB] BAP (Huawei)

Scope: Based on [R2-2203527](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203527.zip), progress remaining proposals. Treat also [R2-2202373](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202373.zip). Determine agreeable parts, points for discussion if needed, open issues if needed. Aim for offline agreement, if not possible then pave the way for efficient on-line. This discussion will continue as post meeting discussion for BAP CR, and updated BAP CR (taking into acc this meetings agreements) can also be reviewed as part of this discussion.

Intended outcome: Report (assume that CR revision is not needed for CB).

Deadline: In time for on-line CB W2 Wednesday

[R2-2203934](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203934.zip) Report of [AT117-e][021][eIAB] BAP Huawei, HiSilicon discussion Rel-17 NR\_IAB\_enh-Core

DISCUSSION March 2

P1

- Fujitsu think A1 is not needed, think configurability is needed, per routing entry, e.g. by adding a flag in current F1 AP config. i.e. Alt2 but F1AP. Nokia agrees and it is clear that it is F1AP.

- Samsung wonder if not alt 2 lead to data loss. Option b doesn’t have this issue at all.

- Huawei think that without tunnels between donor DUs all option will have issues. Think that one goal with option c was to avoid configuration. LGE agrees that option b has same issue, alt2 per routing entry is acceptable.

- QC think we went with c because it was simple, adding complexity now. Think the easiest option is the global disable of rerouting.

- ZTE think alt2 is simple and think that all entries can be disabled. Ericsson agrees.

- vivo think c works well as is, no need to add anything.

- Lenovo think that the disable should be per BAP address, and prefer F1-AP.

3b

- Huawei think this is not easy.

- LGE has significant concern on this, due to complexity, see lots of issues, as RLC is on different level than routing ID.

- Chair: no possibility to converge. Can allow discussion next meeting.

* RAN2 leave the signalling details to RAN3 on open issue BAP#2 and #3 (ref [R2-2203934](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203934.zip)).
* For the flow control feedback triggered local re-routing, the re-routing is performed on routing IDs level.
* As in R16, the trigger conditions (not the propagation) for type 2/3 will be captured in BAP spec. rather than in RRC spec., with just some general descriptions.
* Add new F1AP signalling to directly disable the inter-donor-DU re-routing. The new IE applies to all routing entries.

[R2-2202255](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202255.zip) BAP re-writing mapping confirguration NEC discussion Rel-17 NR\_IAB\_enh-Core

[R2-2202330](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202330.zip) Remaining BAP issues for eIAB Qualcomm Incorporated discussion Rel-17 NR\_IAB\_enh

[R2-2202346](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202346.zip) Discussion on the BAP open issues Fujitsu discussion Rel-17 NR\_IAB\_enh-Core

[R2-2202374](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202374.zip) BAP open issues on option a to d and issues BAP#1, #3 and #4 Huawei, HiSilicon discussion Rel-17 NR\_IAB\_enh-Core

[R2-2202382](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202382.zip) Further considerations on local re-routing ZTE, Sanechips discussion Rel-17

[R2-2202383](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202383.zip) Discussion on re-routing and header rewriting configuration ZTE, Sanechips discussion Rel-17

[R2-2202583](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202583.zip) Discussion on remaining issues for BAP routing Lenovo, Motorola Mobility discussion Rel-17

[R2-2202643](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202643.zip) Discussion on remaining BAP open issues Intel Corporation discussion Rel-17 NR\_IAB\_enh-Core

[R2-2202761](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202761.zip) Remaining issues regarding BH RLF indications InterDigital, Inc. discussion Rel-17 NR\_IAB\_enh-Core

[R2-2202908](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202908.zip) BAP open issues on BAP#01, BAP#03 and BAP#04 Kyocera discussion Rel-17

[R2-2202968](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202968.zip) Remaining Issues of Inter-donor DU Rerouting vivo discussion Rel-17 NR\_IAB-Core

[R2-2202969](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202969.zip) Remaining Issues of Inter-Topology Routing and Rerouting vivo discussion Rel-17 NR\_IAB-Core

[R2-2203053](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203053.zip) Discussion on BAP re-writing mapping configurations for UL inter-donor-DU re-routing LG Electronics Inc. discussion Rel-17 NR\_IAB\_enh-Core

[R2-2203054](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203054.zip) Discussion on identified BAP open issues (BAP#1, BAP#2, BAP#3, BAP#4) LG Electronics Inc. discussion Rel-17 NR\_IAB\_enh-Core

[R2-2203105](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203105.zip) BAP open issues Samsung Electronics GmbH discussion

[R2-2203402](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203402.zip) BAP header rewriting and inter-donor-DU re-routing Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IAB\_enh-Core

[R2-2203403](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203403.zip) Simplified text proposal for BAP routing and header rewriting Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IAB\_enh-Core

[R2-2203469](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203469.zip) BAP open issues Ericsson discussion NR\_IAB\_enh-Core

[R2-2203507](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203507.zip) Header Rewriting for Inter-to-intra topology re-routing Futurewei Technologies discussion

* [021] 19 tdocs above are noted

### 8.4.4 UE capabilities

Features / UE caps developed in RAN2. Note that this AI is complementary to AI 8.0.2. Input to this subclause shall not overlap with any input to any of previous subclasues.

* [AT117-e][022][eIAB] UE capabilities (Intel)

Scope: Treat [R2-2203702](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203702.zip). Determine agreeable parts, points for discussion if needed, open issues if needed. Aim for offline agreement, if not possible then pave the way for efficient on-line. Review Updated draft CRs for UE capabilities (pl provide), including agreements from prev. meeting, and all agreeable points from this meeting (e.g. this discussion and the open issues discussion).

Intended outcome: Report, Draft CRs (38306, 38331) endorsed.

Deadline: In time for on-line CB W2 Wednesday (Report) if CB is needed or W2 Thursday (CRs) if needed

[R2-2203976](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203976.zip) [AT117-e][022][eIAB] UE capabilities (Intel) Intel Corporation draftCR Rel-17 38.306 16.7.0 B NR\_IAB\_enh-Core

DISCUSSION March 2

P1

- SS think only one cap is sufficient. Nokia agrees.

- Huawei think there should be two separate capabilities. Think routing and re-routing are different cases. ZTE agrees.

- LG think we need two bits. Intel also support two bits.

* No need to split UE capability further for different local re-routing trigger conditions.
* No need to differentiate “inter-donor CU routing” UE capability between “inter-donor CU partial migration” and “inter-donor CU routing for topology redundancy”.
* No UE capability is defined for Rel-17 intra-donor DU local re-routing.
* Define a new separate UE capability for BAP header rewriting-based re-routing (including inter-donor DU local re-routing and inter-donor CU re-routing) as optional UE capability for IAB-MT.

R2-2203977 UE capabilities for Rel-17 eIAB Intel Corporation

R2-2203978 UE capabilities for Rel-17 eIAB Intel Corporation draftCR Rel-17 38.331 16.7.0 B NR\_IAB\_enh-Core

[R2-2203702](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203702.zip) AI summary of AI 8.4.4 UE capabilities (Intel) Intel

[R2-2202376](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202376.zip) UE capability issues for eIAB Huawei, HiSilicon discussion Rel-17 NR\_IAB\_enh-Core

[R2-2202384](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202384.zip) Discussion on R17 IAB-MT capabilities ZTE, Sanechips discussion Rel-17

[R2-2202970](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202970.zip) Remaining UE capability for IAB-MT vivo discussion Rel-17 NR\_IAB-Core

[R2-2203113](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203113.zip) eIAB UE capabilities - open issues Samsung Electronics GmbH discussion

[R2-2203212](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203212.zip) Discussion on UE capability for local rerouting Intel Corporation discussion Rel-17 NR\_IAB\_enh-Core

[R2-2203467](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203467.zip) On eIAB capabilities Ericsson discussion NR\_IAB\_enh-Core

* [022] 7 tdocs noted

### 8.4.5 Other

Issues not covered elsewhere.

[R2-2202375](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202375.zip) TP for the Extended BSR Huawei, HiSilicon discussion Rel-17 NR\_IAB\_enh-Core

[R2-2202762](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202762.zip) CHO in IAB InterDigital, Inc. discussion Rel-17 NR\_IAB\_enh-Core

[R2-2202907](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202907.zip) Miscellaneous issues in BAP running CR Kyocera discussion Rel-17

[R2-2203213](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203213.zip) Discussion on RAN2 impact of Solution 1 for Intra-donor CU service interruption reduction Intel Corporation discussion Rel-17 NR\_IAB\_enh-Core

[R2-2203265](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203265.zip) Resolving open issues on BH RLF indications LG Electronics France discussion Rel-17

[R2-2203400](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203400.zip) Remaining details on RLF indications and re-routing aspects upon RLF Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IAB\_enh-Core R2-2201051

[R2-2203466](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203466.zip) RAN2 impact of miscellaneous features driven by RAN3 and RAN1 Ericsson discussion NR\_IAB\_enh-Core

## 8.5 NR IIoT URLLC

(NR\_IIOT\_URLLC\_enh-Core; leading WG: RAN2; REL-17; WID: RP-210854)

Time budget: 1 TU

Tdoc Limitation: 2 tdocs

### 8.5.1 Organizational

Including open issues for control plane and user plane [POST116bis-e][512][IIoT] UP open issues (Samsung) and [POST116bis-e][513][IIoT] CP open issues (Ericsson)

NOTE: NO contributions on these critical open issues are expected

[R2-2202325](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202325.zip) Introduction of enhanced IIoT&URLLC support for NR Ericsson CR Rel-17 38.331 16.7.0 2887 - B NR\_IIOT\_URLLC\_enh

[R2-2202464](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202464.zip) Draft 38.306 CR for Rel-17 NR IIoT URLLC UE capabilities Intel Corporation draftCR Rel-17 38.306 16.7.0 B NR\_IIOT\_URLLC\_enh-Core

[R2-2202465](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202465.zip) Draft 38.331 CR for Rel-17 NR IIoT URLLC UE capabilities Intel Corporation draftCR Rel-17 38.331 16.7.0 B NR\_IIOT\_URLLC\_enh-Core

[R2-2202522](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202522.zip) RAN1 feature impact on intra-UE prioritization in MAC Apple discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2202682](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202682.zip) Introduction of enhanced IIoT&URLLC support for NR Samsung CR Rel-17 38.321 16.7.0 1200 - B NR\_IIOT\_URLLC\_enh-Core

[R2-2202686](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202686.zip) Report of [POST116bis-e][512][IIoT] UP open issue Samsung discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core Late

[R2-2203196](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203196.zip) Introduction of Rel-17 IIoT/URLLC to TS 38.300 Nokia, Nokia Shanghai Bell CR Rel-17 38.300 16.8.0 0416 - B NR\_IIOT\_URLLC\_enh

[R2-2203291](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203291.zip) Propagation Delay Compensation for TSN Qualcomm Incorporated discussion Rel-17 Withdrawn

[R2-2203302](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203302.zip) Summary of [POST116bis-e][513][IIoT] CP open issues (Ericsson) Ericsson discussion NR\_IIOT\_URLLC\_enh Late

### 8.5.2 Enhancements for support of time synchronization

RAN1 progress if any should be taken into account.

Contributions should only be focused on important issues not included in open issues email discussion.

[R2-2202182](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202182.zip) RE: LS on Time Synchronization IEEE 1588 WG LS in To:RAN, SA Cc:RAN2

[R2-2202437](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202437.zip) Remaining issues on time synchronization enhancement OPPO discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2202580](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202580.zip) Left issues for time synchronization Lenovo, Motorola Mobility discussion Rel-17

[R2-2202708](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202708.zip) Discussion on remaining issues for accurate time synchronization Huawei, HiSilicon discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2202728](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202728.zip) Remaining Issues on PDC Enhancement CMCC discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2202750](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202750.zip) Remaining issues of time synchronization ZTE Corporation, Sanechips, China Southern Power Grid Co., Ltd discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2202784](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202784.zip) Simplifying the PRS procedure forRemaining Issues of RTT-based PDC CATT discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2202894](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202894.zip) Remaining issues for PDC vivo discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2203197](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203197.zip) Propagation Delay Compensation signalling Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2203303](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203303.zip) MAC CE update for SRS Spatial Relation Indication Ericsson discussion NR\_IIOT\_URLLC\_enh

[R2-2203461](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203461.zip) Propagation Delay Compensation for TSN Qualcomm Incorporated discussion Rel-17

### 8.5.3 Uplink enhancements for URLLC in unlicensed controlled environments

Contributions should only be focused on important issues not included in open issues email discussion. Proposals related to DRX HARQ RTT timer for one-shot HARQ feedback for NR-U will be treated in in this AI taking into account R2 116-e agreement for R2-2110948 and RAN1 agreements. The Rel-17 RAN1 enhancements one-shot request per HARQ process should be consistend with solution for Rel-16 NR-U where all HARQ processes are enabled.

[R2-2202444](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202444.zip) Discussion on the DRX impact of enhanced HARQ feedback and intra-UE prioritization Lenovo, Motorola Mobility discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2202946](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202946.zip) Configured grant mode switching for IIoT/URLLC in UCE III discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2203294](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203294.zip) RAN2 impacts of RAN1 Agreements on Enhanced HARQ feedback Qualcomm Incorporated discussion

[R2-2203304](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203304.zip) Multi-TB scheduling in UCE Ericsson discussion NR\_IIOT\_URLLC\_enh

### 8.5.4 RAN enhancements based on new QoS

Contributions should only be focused on important issues NOT included in open issues email discussion.

[R2-2202283](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202283.zip) Analysis on N>1 Fujitsu discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core R2-2200309

[R2-2202284](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202284.zip) Survival Time Mode and Measurement Gap Fujitsu discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core R2-2200310

[R2-2202438](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202438.zip) Remaining issues on survival time OPPO discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2202445](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202445.zip) Remaining issues on the support of survival time Lenovo, Motorola Mobility discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2202523](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202523.zip) Remaining issues on RAN enhancements for new QoS Apple discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2202709](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202709.zip) Discussion about UE behaviours for Survival Time state operation Huawei, HiSilicon discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2202726](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202726.zip) Remaining Issues on QoS enhancement CMCC discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2202751](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202751.zip) N and combined Tx-side timer for IIoT QoS ZTE, Sanechips, China Southern Power Grid Co., Ltd, TCL Communication Ltd., vivo discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core R2-2200704

[R2-2202785](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202785.zip) On the support of N>1 for Survival Time solution CATT discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2202834](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202834.zip) Additional aspects on resource in Survival Time III discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2202895](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202895.zip) Discussion on Radio Resource for the duplicated legs in ST vivo discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2203125](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203125.zip) Remaining issues of survival time requirements Xiaomi Communications discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core R2-2201375

[R2-2203144](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203144.zip) Finalising Survival Time related enhancements Samsung Electronics GmbH discussion

[R2-2203198](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203198.zip) On Closure of Survival Time Objective Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2203460](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203460.zip) Remaining issues on the support of survival time InterDigital discussion Rel-18 NR\_IIOT\_URLLC\_enh-Core

## 8.6 Small Data enhancements

(NR\_SmallData\_INACTIVE-Core; leading WG: RAN2; REL-17; WID: RP-212594)

Time budget: 1.5 TU

Tdoc Limitation: 2 tdocs

### 8.6.1 Organiztional

In coming LSs, rapporteur input for email discussions summaires etc (tdocs in this don’t count towards tdoc limit).

Inputs expected for 38.321 CR (Huawei), 38.331 CR (ZTE), 38.300 CR (Nokia)

Including [Post116-e][506][SDT] RRC running CR update (ZTE), [Post116-e][507][SDT] MAC running CR update (Huawei), and [Post116-e][508][SDT] Stage-2 running CR update (Nokia)

[R2-2202143](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202143.zip) Reply LS on the ROHC continuity for SDT (R3-221471; contact: Huawei) RAN3 LS in Rel-17 To:RAN2

[R2-2202144](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202144.zip) LS on handling of DL non-SDT during SDT procedure (R3-221472; contact: CATT) RAN3 LS in Rel-17 To:RAN2

R2-2202594 Running MAC CR for small data Huawei, HiSilicon draftCR Rel-17 38.321 16.7.0 B NR\_SmallData\_INACTIVE-Core Withdrawn

R2-2202595 Summary of [Post116-e][507][SDT] MAC running CR update (Huawei) Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core Withdrawn

[R2-2202611](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202611.zip) Introduction of Small Data Transmission for MAC spec Huawei, HiSilicon CR Rel-17 38.321 16.7.0 1198 - B NR\_SmallData\_INACTIVE-Core Late

[R2-2202612](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202612.zip) Summary of [POST116bis-e][510][Sdata] Running MAC CR Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core Late

[R2-2202672](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202672.zip) UE capabilities for Rel-17 SDT Intel Corporation draftCR Rel-17 38.306 16.7.0 B NR\_SmallData\_INACTIVE-Core

[R2-2202673](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202673.zip) UE capabilities for Rel-17 SDT Intel Corporation draftCR Rel-17 38.331 16.7.0 B NR\_SmallData\_INACTIVE-Core

[R2-2203279](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203279.zip) Stage-2 introduction of SDT Nokia, Nokia Shanghai Bell CR Rel-17 38.300 16.8.0 0357 6 B NR\_SmallData\_INACTIVE-Core R2-2202014

[R2-2203296](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203296.zip) Introduction of SDT ZTE Corporation (rapporteur) CR Rel-17 38.331 16.7.0 2937 - B NR\_SmallData\_INACTIVE-Core Late

### 8.6.2 User plane common aspects

Including email discussion [POST116bis-e][510][Sdata] UP open issues (Huawei) – NO contributions on these issues.

Any other contributions should focus on important issues not covered by open issues email discussions. Issues that have been discussed and not agreed in the past should not be brought again, unless there is large support (i.e. large number of companies co-sourced contributions)

[R2-2202274](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202274.zip) Discussion on user plane issues of SDT OPPO discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2202342](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202342.zip) CG-SDT-TAT expiry handing during the CG-SDT procedure Samsung Electronics Co., Ltd discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2202446](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202446.zip) Remaining UP issues for SDT Lenovo, Motorola Mobility discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2202609](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202609.zip) Summary of [POST116bis-e][510][Sdata] UP open issues (Huawei) Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core Late

[R2-2202610](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202610.zip) Remaining issues for SDT user plane Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2202735](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202735.zip) Remaining issues of user plane aspects of SDT China Telecom discussion

[R2-2202959](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202959.zip) Remaining issues on UP aspects of SDT Qualcomm Incorporated discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2202983](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202983.zip) Remaining UP Issues on SDT Procedure vivo discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2203008](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203008.zip) Remaining user plane aspects of SDT NEC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2203158](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203158.zip) User Plane Aspects for SDT Ericsson discussion Rel-17 NR\_MT\_SDT-Core Late

[R2-2203280](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203280.zip) UP and CG aspects for SDT Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2203458](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203458.zip) Remaining UP issues for SDT InterDigital discussion Rel-17 NR\_SmallData\_INACTIVE-Core

### 8.6.3 Control plane common aspects

Including email discussion [POST116bis-e][511][Sdata] CP open issues (ZTE) - NO contributions on these issues

Any other contributions should focus on important issues not covered by open issues email discussions. Issues that have been discussed and not agreed in the past should not be brought again, unless there is large support (i.e. large number of companies co-sourced contributions)

One co-sourced contributions and/or TPs on DCCH/CCCH solution will not count towards contribution limit.

[R2-2202275](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202275.zip) Discussion on control plane issues of SDT OPPO discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2202556](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202556.zip) Control plane aspects of SDT Apple discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2202590](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202590.zip) Analysis on CP open issue of SDT Lenovo, Motorola Mobility discussion Rel-17

[R2-2202674](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202674.zip) Additional discussion on identified open CP issues Intel Corporation discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2202736](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202736.zip) Remaining issues of control plane aspects of SDT China Telecom discussion

[R2-2202805](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202805.zip) Handling of DL non-SDT during SDT CATT discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2202846](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202846.zip) Remaining issue on CS-RNTI configuration for CG-SDT ASUSTeK discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2202960](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202960.zip) Remaining issues on CP aspects of SDT Qualcomm Incorporated discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2202982](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202982.zip) Further Consideration on the Handling of non-SDT Data Arrival vivo discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2201441

[R2-2203009](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203009.zip) Remaining control plane aspects of SDT NEC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2203155](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203155.zip) CP aspects for SDT Ericsson discussion Rel-17 NR\_MT\_SDT-Core Late

[R2-2203299](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203299.zip) [POST116bis-e][511][Sdata] - Running CR comments summary ZTE Wistron Telecom AB report

[R2-2203300](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203300.zip) [POST116bis-e][511][Sdata] - CP open issue list summary ZTE Wistron Telecom AB report

[R2-2203337](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203337.zip) Control plane common aspects for SDT Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core Late

[R2-2203338](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203338.zip) CCCH based non-SDT data indication Huawei, HiSilicon draftCR Rel-17 38.331 16.7.0 NR\_SmallData\_INACTIVE-Core Late

[R2-2203353](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203353.zip) SDT control plane aspects Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SmallData\_INACTIVE

[R2-2203475](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203475.zip) Introduction of DCCH solution for non-SDT data arrival Intel Corporation, ZTE Corporation, Sanechips, Samsung, Xiaomi, MediaTek, Radisys, Reliance JIO, Qualcomm, CMCC, OPPO, Lenovo, Sony, Apple, CATT, AT&T draftCR Rel-17 38.331 16.7.0 NR\_SmallData\_INACTIVE-Core

## 8.7 NR Sidelink relay

(NR\_SL\_Relay-Core; leading WG: RAN2; REL-17; WID: RP-212601)

Time budget: 2 TU

Tdoc Limitation: 3 tdocs

### 8.7.1 Organizational

Incoming LSs, TS updates, rapporteur inputs. This AI is reserved for rapporteur and organizational inputs. Documents in this AI do not count towards the tdoc limitation. For LSes that need action or have impact beyond taking into account by CR rapporteurs: One tdoc by contact company (one company) to address the LS and potential reply is considered Rapporteur Input and may be provided. Related documents and proposed responses from companies other than the contact company should be submitted to the corresponding technical agenda item (and do count towards the tdoc limitation).

[R2-2202127](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202127.zip) Reply LS for authorization information for 5G ProSe Layer-3 Remote UE (R3-221202; contact: CATT) RAN3 LS in Rel-17 To:SA2, RAN2

[R2-2202136](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202136.zip) LS on mapping configuration of sidelink relay (R3-221411; contact: Samsung) RAN3 LS in Rel-17 To:RAN2

[R2-2202201](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202201.zip) Work planning for R17 SL relay OPPO, CMCC Work Plan Rel-17 NR\_SL\_relay-Core

[R2-2202202](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202202.zip) Remaining open issues for R17 SL relay OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2202276](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202276.zip) Running CR for TS 38.351 OPPO draft TS Rel-17 38.351 0.4.0 NR\_SL\_relay-Core

[R2-2202343](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202343.zip) Stage 2 CR on Introduction of R17 SL Relay MediaTek Inc. CR Rel-17 38.300 16.8.0 0403 - B NR\_SL\_relay-Core

[R2-2202543](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202543.zip) Introduction of Sidelink Relay Apple CR Rel-17 38.321 16.7.0 1194 - B NR\_SL\_relay-Core

[R2-2202544](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202544.zip) Discussion on remaining issues of MAC CR Apple discussion Rel-17 NR\_SL\_relay-Core

[R2-2202738](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202738.zip) RRC corrections on path switch NEC Corporation discussion Rel-17 NR\_SL\_relay\_enh-Core

R2-2202781 Stage 2 Running CR on Introduction of R17 SL Relay MediaTek Inc. CR Rel-17 38.300 16.8.0 0410 - B NR\_SL\_relay-Core Withdrawn

[R2-2202819](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202819.zip) Introduction of SL relay Huawei, HiSilicon CR Rel-17 38.331 16.7.0 2910 - B NR\_SL\_relay-Core

[R2-2202820](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202820.zip) Stage3 open issues handling for RRC CR Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

[R2-2202847](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202847.zip) Reflecting agreement on sidelink resource allocation mode configuration for L2 U2N remote UE in RRC running CR ASUSTeK discussion Rel-17 38.331 NR\_SL\_relay-Core

[R2-2202950](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202950.zip) Introduction of SL Relay in 38.322 Samsung CR Rel-17 38.322 16.2.0 0046 - B NR\_SL\_relay-Core

[R2-2202951](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202951.zip) Introduction of SL Relay in 38.323 Samsung CR Rel-17 38.323 16.6.0 0086 - B NR\_SL\_relay-Core

[R2-2202952](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202952.zip) Discussion on RAN3 LS on mapping configuration of sidelink relay Samsung discussion Rel-17 NR\_SL\_relay-Core

[R2-2203324](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203324.zip) 38.304 CR for SL relay Ericsson CR Rel-17 38.304 16.7.0 0232 - B NR\_SL\_relay-Core

[R2-2203325](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203325.zip) Way forward on open issues in 38.304 for SL relay Ericsson discussion Rel-17 NR\_SL\_relay-Core

### 8.7.2 Open issues

No documents should be submitted to 8.7.2. Please submit to 8.7.2.x.

#### 8.7.2.1 Control plane procedures

Including connection management, SI delivery, paging, access control for remote UE.

Including report of [Pre117-e][605][Relay] Open issues on relay control plane procedures (Huawei).

[R2-2202184](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202184.zip) Remaining issues on control plane procedure of L2 U2N relay Qualcomm Incorporated discussion NR\_SL\_relay-Core

[R2-2202340](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202340.zip) Left issue on NR sidelink relay control plane procedure OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2202344](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202344.zip) Discussion on notification of cell reselection and HO of a relay UE SHARP Corporation discussion NR\_SL\_relay-Core

[R2-2202345](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202345.zip) Discussion on SRAP config SHARP Corporation discussion NR\_SL\_relay-Core

[R2-2202357](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202357.zip) Indication to Upper Layer to Trigger Service Request of L2 Relay CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2202358](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202358.zip) Impacts on RAN of AN Release of Relay UE CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2202379](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202379.zip) Further discussion on RRC connection establishment of remote UE ZTE, Sanechips discussion Rel-17

[R2-2202411](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202411.zip) Remaining open issues on control plane procedures for L2 U2N relay Spreadtrum Communications discussion Rel-17

[R2-2202471](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202471.zip) On Capturing the Agreements Related to SI in the RRC CR InterDigital discussion Rel-17 NR\_SL\_relay-Core

[R2-2202472](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202472.zip) Cause Value Setting for Connection Establishment for UE to NW Relays InterDigital discussion Rel-17 NR\_SL\_relay-Core

[R2-2202473](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202473.zip) Handling the Sidelink Notification Message InterDigital discussion Rel-17 NR\_SL\_relay-Core

[R2-2202567](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202567.zip) Further Discussion on L2 CP Issue O6.03 vivo discussion

[R2-2202569](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202569.zip) Draft reply LS on establishment/resume cause value on L2 SL Relay vivo LS out To:CT1 Cc:SA2, RAN3

[R2-2202822](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202822.zip) Summary of [Pre117-e][605][Relay] Open issues on relay control plane procedures Huawei, HiSilicon report Rel-17 NR\_SL\_relay-Core Late

[R2-2202953](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202953.zip) Open issue on SI request over PC5 Samsung discussion Rel-17 NR\_SL\_relay-Core

[R2-2203135](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203135.zip) Considerations on cause codes Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SL\_relay\_enh-Core

[R2-2203148](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203148.zip) Discussion on connection control open issues Xiaomi discussion

[R2-2203178](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203178.zip) Remaining issues on CP Lenovo, Motorola Mobility discussion NR\_SL\_relay-Core

[R2-2203272](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203272.zip) Support of relay UE in RRC\_IDLE/INACTIVE state during direct to indirect path switching Nokia, Nokia Shanghai Bell discussion NR\_SL\_relay\_enh-Core Late

[R2-2203306](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203306.zip) Setting cause value for Relay UE access Intel Corporation discussion Rel-17 NR\_SL\_relay-Core

[R2-2203308](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203308.zip) Discussion on added latency for paging forwarding Nokia, Nokia Shanghai Bell discussion NR\_SL\_relay-Core

[R2-2203326](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203326.zip) Remaining issues on control plane for L2 sidelink relay Ericsson discussion Rel-17 NR\_SL\_relay-Core

#### 8.7.2.2 Service continuity

Service continuity between Uu and relay paths, limited to intra-gNB cases.

Including report of [Pre117-e][603][Relay] Open issues on relay service continuity (CATT)

[R2-2202185](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202185.zip) Remaining issues on service continuity of L2 U2N relay Qualcomm Incorporated discussion NR\_SL\_relay-Core

[R2-2202341](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202341.zip) Left issue on NR sidelink relay service continuity OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2202356](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202356.zip) Report of [Pre117-e][603][Relay] Open Issues on Relay Service Continuity (CATT) CATT report Rel-17 NR\_SL\_relay-Core Late

[R2-2202380](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202380.zip) Remaining issues on service continuity ZTE, Sanechips discussion Rel-17

[R2-2202545](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202545.zip) Discussion on remaining issues for direct-to-indirect path switch Apple discussion Rel-17 NR\_SL\_relay-Core

[R2-2202584](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202584.zip) Path switching in L2 U2N relay case Lenovo, Motorola Mobility discussion Rel-17

[R2-2202821](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202821.zip) Stage3 issue on NCGI reporting in measurement result Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

[R2-2202848](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202848.zip) Potential issues on multiple PDU sessions handling during U2N direct to indirect path switching ASUSTeK discussion Rel-17 NR\_SL\_relay-Core

[R2-2203202](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203202.zip) Service continuity open issues in L2 NR sidelink relay Sony discussion Rel-17 NR\_SL\_relay-Core

#### 8.7.2.3 Adaptation layer design

Including bearer mapping, remote UE identification, security aspects if any.

Including report of [Pre117-e][604][Relay] Open issues on relay adaptation layer (OPPO)

[R2-2202200](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202200.zip) Summary of [Pre117-e][604][Relay] Open issues on relay adaptation layer (OPPO) OPPO report Rel-17 NR\_SL\_relay-Core Late

[R2-2202392](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202392.zip) Discussion on SRAP for L2 U2N relay Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

[R2-2202429](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202429.zip) Remaining issues of the adaptation layer Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2202675](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202675.zip) Remaining issue on sidelink adaptation layer Qualcomm Incorporated discussion NR\_SL\_relay-Core

R2-2202854 SRAP header format design CMCC discussion Rel-17 NR\_SL\_relay-Core Withdrawn

[R2-2202897](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202897.zip) Discussion on UE's L2 ID Sharp discussion

[R2-2203172](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203172.zip) SRAP - miscellaneous issues Samsung Electronics GmbH discussion

#### 8.7.2.4 QoS

Mechanisms for E2E QoS management.

Including report of [Pre117-e][602][Relay] Open issues on relay QoS (Samsung)

[R2-2202339](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202339.zip) Left issue on QoS for layer 2 relay OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2202381](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202381.zip) Miscellaneous issues on bearer mapping and QoS ZTE, Sanechips discussion Rel-17

[R2-2202428](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202428.zip) Aspects for QoS management with SL relay Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2202954](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202954.zip) Open issue on new code-point for address resolution protocol (ARP) in PDCP SDU type Samsung discussion Rel-17 NR\_SL\_relay-Core

[R2-2202955](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202955.zip) Summary of [Pre117-e][602][Relay] Open issues on relay QoS (Samsung) Samsung discussion Rel-17 NR\_SL\_relay-Core Late

#### 8.7.2.5 Discovery and re/selection

Including 5G ProSe Direct Discovery for the non-relaying case. Re-using LTE discovery and re/selection as baseline.

Including report of [Pre117-e][601][Relay] Discovery and relay re/selection (ZTE)

[R2-2202186](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202186.zip) Remaining issues on discovery and relay (re)selection Qualcomm Incorporated discussion NR\_SL\_relay-Core

[R2-2202378](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202378.zip) Summary of [Pre117-e][601][Relay] Discovery and relay re-selection (ZTE) ZTE, Sanechips discussion Rel-17 Late

[R2-2202412](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202412.zip) Remaining issues on NotificationMessageSidelink message Spreadtrum Communications discussion Rel-17

[R2-2202568](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202568.zip) Remaining issues on Discovery and Relay (re)selection vivo discussion

[R2-2202585](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202585.zip) Discovery and Relay (re)selection in L2 and L3 relay case Lenovo, Motorola Mobility discussion Rel-17

[R2-2202849](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202849.zip) Issues on priority between PC5 signalling and SL discovery ASUSTeK discussion Rel-17 38.321 NR\_SL\_relay-Core

[R2-2203233](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203233.zip) Discussion on relay re-selection and discovery Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

[R2-2203506](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203506.zip) Sidelink discovery support as indicated within SIB12 Beijing Xiaomi Mobile Software discussion Rel-17

#### 8.7.2.6 UE capabilities

Including report of [Pre117-e][606][Relay] Open issues on relay UE capabilities (Qualcomm)

[R2-2202359](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202359.zip) Further Discussion on UE Capability CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2202676](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202676.zip) Summary report of offline606 - Open issues on relay UE capabilities (Qualcomm) Qualcomm Incorporated discussion NR\_SL\_relay-Core Late

### 8.7.3 Other

Any other topics on NR sidelink relay.

## 8.8 RAN slicing

(NR\_Slice -Core; leading WG: RAN2; REL-17; WID: RP-212534)

Time budget: 0.5 TU

Tdoc Limitation: 3 tdocs

Contributions should illustrate the Stage-3 details of the proposals (e.g. in an Annex containing TP against the running CRs). If a contribution does not provide TP, it may be deprioritized.

Contributions should focus on remaining open issues needed to close the WI from RAN2 perspective (e.g. as discussed in [203])

### 8.8.1 Organizational

Including LSs, any rapporteur inputs and results of the (informative) running CR email discussions [241]-[243]

Including rapporteur input on remaining open issues needed to close the WI.

[R2-2202443](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202443.zip) Introduction of RAN Slicing OPPO CR Rel-17 38.321 16.7.0 1190 - B NR\_slice-Core

[R2-2202616](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202616.zip) List of open issues for RAN slicing WI CMCC discussion Rel-17 FS\_NR\_slice R2-2201730

[R2-2203021](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203021.zip) Report of [Post116-e][243][Slicing] Running NR RRC CR for RAN slicing (Huawei) Huawei discussion Rel-17 NR\_slice-Core

[R2-2203022](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203022.zip) NR RRC CR for RAN slicing Huawei, HiSilicon CR Rel-17 38.331 16.7.0 2921 - B NR\_slice-Core

[R2-2203069](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203069.zip) RAN enhancements in the support of slicing Nokia, Nokia Shanghai Bell CR Rel-17 38.300 16.8.0 0413 - B NR\_slice-Core

### 8.8.2 Cell reselection

This agenda item may use a summary document (decision to be made based on submitted tdocs)

Including discussion (with TPs) on how to realize the slice-specific reselection without using specific slice priority value formula when evaluating cell reselection

Including discussion on slice groups and details of how to handle (e.g. slice group mapping to RA, PCI list and/or TAC per slice, UE behaviour if gNB doesn't provide supported slice group info on the best ranked cell, handling of low priority slices, etc.)

[Pre117-e][240][Slicing] Summary of slice-specific cell reselection (CMCC)

Scope: Provide summary of Stage-3 aspects of MUSIM configuration according to open issue list.

Intended outcome: Summary document in R2-220xxxx.

Deadline: TBD

[R2-2202187](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202187.zip) Remaining issues on slice specific cell reselection Qualcomm Incorporated discussion NR\_slice-Core

[R2-2202350](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202350.zip) Considerations on the slice group in slice based cell reselection Beijing Xiaomi Software Tech discussion

[R2-2202416](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202416.zip) Discussion on the details of slice based cell reselection procedure Spreadtrum Communications discussion Rel-17

[R2-2202417](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202417.zip) Discussion on remaining issues for slice based cell reselection Spreadtrum Communications discussion Rel-17

[R2-2202439](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202439.zip) Remaining issues on slice-specific cell reselection OPPO discussion Rel-17 NR\_slice-Core

[R2-2202514](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202514.zip) Text Proposal for slice based cell re-selection Apple, BT plc discussion Rel-17 NR\_slice-Core

[R2-2202617](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202617.zip) Discussion on open issues for slice based cell reselection CMCC discussion Rel-17 FS\_NR\_slice

[R2-2202640](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202640.zip) Further considerations of slice based cell reselection without formula Intel Corporation discussion Rel-17 NR\_slice-Core

[R2-2202690](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202690.zip) The remaining issues on slice based cell reselection CATT discussion Rel-17 NR\_slice-Core

[R2-2203018](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203018.zip) Discussion on slice based Cell reselection under network control Huawei, HiSilicon discussion Rel-17 NR\_slice-Core

[R2-2203070](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203070.zip) Considerations on slice groups Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_slice-Core

[R2-2203071](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203071.zip) Slice-based cell reselection proposal Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_slice-Core

[R2-2203086](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203086.zip) Discussion on slice based cell reselection LG Electronics UK discussion Rel-17

R2-2203145 Discussion on slice based cell re-selection China Telecommunications discussion Rel-17 NR\_slice-Core Late

[R2-2203150](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203150.zip) Discussion on slice based cell re-selection China Telecommunications discussion Rel-17 NR\_slice-Core

[R2-2203179](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203179.zip) Remaining open points on RAN slicing Samsung R&D Institute UK discussion

[R2-2203183](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203183.zip) Way forward and TP for RAN Slicing solution Lenovo, Motorola Mobility discussion NR\_slice-Core

[R2-2203234](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203234.zip) Cell reselection relevant open issues (38.304) NEC Telecom MODUS Ltd. discussion

[R2-2203235](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203235.zip) Cell reselection relevant open issues (RRC) NEC Telecom MODUS Ltd. discussion

[R2-2203266](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203266.zip) Realising Prioritisation rules for option A without Formula Samsung R&D Institute UK, Qualcomm Incorporated discussion

[R2-2203271](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203271.zip) Text Proposal for 38.304 on cell reselection for RAN slicing Samsung R&D Institute UK, Qualcomm Incorporated, OPPO discussion

[R2-2203387](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203387.zip) Leftover issues in slice based cell reselection ZTE corporation,Sanechips discussion Rel-17 NR\_slice-Core

[R2-2203411](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203411.zip) RAN Slicing enhancements in shared RAN Ericsson discussion Rel-17 NR\_slice-Core

[R2-2203412](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203412.zip) On open issues for cell re-selection Ericsson discussion Rel-17 NR\_slice-Core

R2-2203452 Slice information provided by RRCRelease SHARP Corporation discussion Rel-17 R2-2201200 Late

[R2-2203509](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203509.zip) [Pre117-e][240][Slicing] Summary of slice-specific cell reselection (CMCC) CMCC discussion Rel-17 NR\_slice-Core Late

### 8.8.3 RACH

Including discussion based on remaining open issues for RAN slicing-specific RACH prioritization that are not discussed as part of the common RACH prioritization agenda (if any)

NOTE: The common discussion on Rel-17 RACH partitioning will be discussed under AI 8.18. This AI will only consider RACH partitioning from slicing perspective.

[R2-2202188](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202188.zip) Remaining issues on slice specific RACH Qualcomm Incorporated discussion NR\_slice-Core

[R2-2202418](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202418.zip) Consideration on remaining issues for slice specific RACH Spreadtrum Communications discussion Rel-17

[R2-2202440](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202440.zip) Remaining issues on slice-specific RACH OPPO discussion Rel-17 NR\_slice-Core

[R2-2202515](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202515.zip) Discussion on RACH in slicing Apple discussion Rel-17 NR\_slice-Core

[R2-2202618](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202618.zip) Discussion on open issues for slice based RACH configuration CMCC discussion Rel-17 FS\_NR\_slice

[R2-2202691](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202691.zip) The remaining issues on slice specific random access CATT discussion Rel-17 NR\_slice-Core

[R2-2203019](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203019.zip) Discussion on slice based RACH configuration Huawei, HiSilicon discussion Rel-17 NR\_slice-Core

[R2-2203064](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203064.zip) Remaining issues on slice based RACH LG Electronics Inc. discussion Rel-17 NR\_slice-Core

[R2-2203388](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203388.zip) Further consideration on slice specific RACH ZTE corporation,Sanechips discussion Rel-17 NR\_slice-Core

[R2-2203401](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203401.zip) Detailed RRC signalling for RACH prioritization configuration Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_slice-Core

### 8.8.4 UE capabilities

Including discussion on UE capabilities related to RAN2-defined features for RAN slicing. If changes are proposed against the baseline endorsed in previous meeting, the proposals should illustrate the differences to the baseline illustrated in R2-2109627.

[R2-2202189](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202189.zip) Further discussion on UE capablity related to RAN slicing enhancement Qualcomm Incorporated discussion NR\_slice-Core

[R2-2202210](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202210.zip) Considerations on UE capability for RAN slicing Beijing Xiaomi Software Tech discussion Rel-17

[R2-2202441](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202441.zip) Remaining issues on UE capability for Slicing OPPO discussion Rel-17 NR\_slice-Core

[R2-2202619](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202619.zip) Discussion on UE capability for RAN slicing enhancement CMCC discussion Rel-17 FS\_NR\_slice

[R2-2202641](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202641.zip) UE capability for Slicing enhancement Intel Corporation discussion Rel-17 NR\_slice-Core

[R2-2202692](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202692.zip) Analysis on UE capability for RAN slicing enhancement CATT discussion Rel-17 NR\_slice-Core

[R2-2203020](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203020.zip) Discussion on UE capabilities for RAN slicing Huawei, HiSilicon discussion Rel-17 NR\_slice-Core

[R2-2203413](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203413.zip) UE Capabilities for Slice-based Cell re-selection and RA Ericsson discussion Rel-17 NR\_slice-Core

## 8.9 UE Power Saving

(NR\_UE\_pow\_sav\_enh-Core; leading WG: RAN2; REL-17; WID: RP-212632)

Time budget: 1 TU

Tdoc Limitation: 3 tdocs

RP 93e: PEI: Support PDCCH-based PEI as the only option.

* From R2 point of view the WI can be closed

### 8.9.1 General

* [AT117-e][004][ePowSav] PEI and paging subgrouping (MediaTek)

Scope:

Following the on-line discussion on [R2-2202769](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202769.zip):

a) clarify details on UE behaviour for PEI in last cell, e.g. UE storing last cell info etc, and related TS impacts (can ask input on what need to be clarified).

b) whether we can assume that PEI with no subgrouping is implemented by using PEI + UEID subgrouping with one subgroup, or whether also other variants should be supported.

Treat [R2-2203720](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203720.zip) (taking into account on-line agreements).

Determine agreeable points, points for discussion if needed

Intended outcome: Report.

Deadline: In time for CB online W2 Tuesday

CLOSED

[R2-2203901](file:///C:\Users\johan\OneDrive\Dokument\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203901.zip) Report of [AT117-e][004][ePowSav] PEI and paging subgrouping MediaTek Inc. discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

* A PEI-capable UE stores its “last used cell” information. FFS on how to capture this in the specifications.
* Do not introduce an associated timer for the “last used cell” information stored by UE.
* The “lastUsedCellOnly” indication is a cell-level configuration and there is no per-subgroup indication.
* Introduce a one-bit indication of *lastUsedCellOnly* in *PEI-Config*.
* RAN2 clarifies the meaning of “last used cell only”: When a cell broadcasts “last used cell only”, a UE monitors PEI only if its last connection was released by this cell.
* A PEI-capable UE must support at least UEID-based subgrouping method.
* RAN2 confirms that “PEI without subgrouping” can be implemented by configuring PEI plus UEID subgrouping with one subgroup.
* “PEI without subgrouping” can be configured by only one method.
* When PEI is applied with eDRX, the UEID for UEID-based subgrouping is determined by 5G-S-TMSI mod 32768.
* No special handling or configuration is introduced for PEI monitoring with PTW (i.e., PEI is applicable to each PO within PTW)
* Send an informative LS to RAN3/SA2/CT1 for RAN2 agreements about PEI and paging subgrouping and ask question about mismatched understanding of “last cell” between network and UE.
* If a UE cannot find its subgroup ID with the PEI configurations in a cell, it monitors legacy paging.

DISCUSSION 2

P4

- HW think this may be needed. Would be ok to send an LS to RAN3.

- OPPO think this is not needed. We don’t need to duplicate the design of LTE. We don’t have time.

- MTK think we should ask R3. VDF think we should cc SA2

- Nokia think we can keep P4 FFS

- xiaomi wonder about UEs in inactive mode. MTK think we can wait f R3

- vivo ok to send LS.

P9 P13

- HW wonder if this scenario may happen, shouldn’t CN assigned subgrouping be supported uniformly by all gNBs in the TA. MTK are not sure whether this will always be guaranteed.

- Intel also think there need to be uniformity, but can agree on P9 ..

- Nokia think R2 doesn’t need to do anything. Xiaomi agrees R3 has a solution.

- Vivo think P13-1 is reasonable. Apple agrees, and think P9 is not good as it leads to reassignement. Nokia doesn’t support P13-1.

- VDF think that uniform support in all cells in TAI LIST cannot be assumed by RAN. Sony agrees.

P13

- LGE think the issue may be that anchor gNB does not support subgrouping.

- Nokia think P13 can be left to R3, e.g. if the signalling done by containers then also non-supporting nodes can support signalling.

- Huawei agrees with the problem scenario.

P15

- Ericsson indicate that this is to limit the number of PEIs (the number of PEI occasion).

- Samsung see no need for this, just more overhead.

- MTK think it is a significant change.

- vivo think it is not essential and it is very late. Can consider in a fitire release.

- Chair: signifcant opposition, not sufficient support.

* Agree the easy agreement proposals (removing whether from P1).
* On P4 send an LS to RAN3 cc SA2, asking about the issue, can also indicate tentative solution and invite for feedback. Ask R3 also on P13, to what extent this may be a problem.
* A UE with CN-assigned subgroup ID should derive UEID-based subgroup ID in a cell supporting only UEID-based subgrouping.
* [AT117-e][005][ePowSav] TRS / CSI-RS Open Issues (CATT)

Scope: Progress the discussion on Using TRS / CSI RS with eDRX, e.g. a) Clarify necessary restrictions assumptions for how this can work assuming no specific modifications, b) Consider if and how to handle situation when such restrictions assumptions seems unreasonable (are there such situations?), e.g. if to exclude eDRX UEs (and how), whether some simple enhancement can improve the situation.

Intended outcome: Report

Deadline: In time for CB online W2 Tuesday

CLOSED

[R2-2203914](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203914.zip) Report of [AT117-e][005][ePowSav] TRS / CSI-RS Open Issues Input (CATT) CATT discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

DISCUSSION

- Chair initially proposes to merge P2 and P3: “to allow updating the TRS configuration of DRX UEs quicker than 6h when eDRX is supported in the cell, eDRX UE cannot use TRS from the time it receives change notification for eDRX UEs to the time it receives the updated SI”

- ZTE think we just need validity duration, and the UE cap determine by itself whether configuration is applicable. CATT think there are cases of validity duration reactivation. ZTE think this will not happen before duration expiration.

- LG think that with P3 there is still issues. UE need to verify by receiving SI.

- Ericsson don’t want to tie the configuration to a certain time window. Think that for eDRX the main saving is anyway eDRX and such UEs can use SSB. CATT think that this is another solution, where UEs with longer DRX period than SI modification period ignores the TRS config. QC agrees

- OPPO think the observation should be that eDRX UE may have different config than other UE.

- Chair: Not sufficient support to introduce anything special for UEs in eDRX.

* Not sufficient support to introduce any special functionality for UEs in eDRX. Rely on UE determination on whether he has up to date information or not. Can think about whether clarification is needed.
* [AT117-e][006][ePowSav] RLM BFD relaxation (vivo)

Scope: Continue with Detailed aspects taking into account LS in, specify configuration etc, and whether a Reply LS is needed, see e.g. [R2-2202306](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202306.zip). Aim to agree offline, CB only if needed.

Intended outcome: Report, TPs (if applicable), Approved Reply LS (if applicable)

Deadline: W2 Tuesday (offline only)

CLOSED

[R2-2203967](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203967.zip) Report of [AT117-e][006][ePowSav] RLM BFD relaxation (vivo) vivo discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

DISCUSSION

P1 P2 P4

- Nokia wonder what is enable/disable? Is it just configuration? Chair think this is just configuration. Huawei think we have pre-defined values and need enable/disable whether to use those or not. Chair think in any case this is just a configuration, if configuration could be empty due to default values being used, that is ok.

- P4 CATT think there are different ways to capture this, so the value two seems misleading. OK to remove enable/disable for P1.

* The configuration for RLM relaxation feature and BFD relaxation feature are provided in *SpCellConfig* and *SpCellConfig/ScellConfig*, respectively.
* Low mobility criterion is configured in NR Pcell for the case of NR SA/ NR CA/ NE-DC/NR-DC, and in the NR PSCell for the case of EN-DC.
* Introduce optional parameter(s) of offset on Qx (Qin for RLM relaxation and FFS for BFD relaxation) for good serving cell quality criterion in dedicated signaling. If the offset is absent, a pre-defined value is used (e.g. FFS [0dB]). FFS on stage-3 details (i.e. value range of parameters).
* Serving cell quality criterion is configured provided in PCell/PScell for RLM relaxation and in PCell/PScell for BFD relaxation (regarding Scell waiting for R4 input)

R2-2203968 [Draft] LS to RAN4 on RLM BFD relaxation for ePowSav vivo LS out Rel-17 NR\_UE\_pow\_sav\_enh-Core To:RAN4

* [AT117-e][024][ePowSav] PDCCH skip (Samsung)

Scope: Treat [R2-2203708](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203708.zip). Determine agreeable points, points for discussion if needed

Intended outcome: Report

Deadline: In time for CB online W2 Tuesday

CLOSED

[R2-2203896](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203896.zip) Report of [AT117-e][024][ePowSav] PDCCH skip (Samsung) Samsung discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

DISCUSSION

P1 2 3

- LG think these topics should not be discussed in RAN2 at all. LG think RAN1 already work on these aspects.

- QC are ok with P2 P3. For P1 think LC restriction need to be considered. Think is sufficient to ignore skipping on the cells that maybe used for the CG. Samsung think the restrictions are for UL and not for PDCCH, and note that we have SR also for other purpose, such as BFR etc. QC think this is important and esp for multi band scenarios it is good to be able to skip PDCCH.

- vivo think R1 may have some feedback on R2 conclusions, think we can wait for R1. Think the R2 decisions have significant impact in R1.

- Nokia think R2 people and explain to their R1 colleges, support P1 P2 P3. For the QC comment, support this view.

- Huawei think we can consider these agreements in R2.

- ZTE support p123, on the QC comment, think we don’t need additional complexity.

P4

- ZTE think we wait for R1. Nokia doesn’t understand why we should wait for R1.

**RAN2 clarifications to earlier RAN2 decisions:**

* P1: UE ignores PDCCH skipping on all serving cells of the corresponding CG while SR is pending (FFS if “all” can be further restricted).
* P2: If PDCCH skipping is applied to RNTI(s) monitored during RAR/MsgB window, UE ignores PDCCH skipping on SpCell.
* P3: UE ignores PDCCH skipping on SpCell while contention resolution timer is running.

#### 8.9.1.1 Organizational

Tdoc Limitation: 0

Planning etc

R2-2204041 Introduction of UE capabilities for Rel-17 UE power saving Intel Corporation draftCR Rel-17 38.306 16.7.0 B NR\_UE\_pow\_sav\_enh-Core

R2-2204042 Introduction of UE capabilities for Rel-17 UE power saving Intel Corporation draftCR Rel-17 38.331 16.7.0 B NR\_UE\_pow\_sav\_enh-Core

#### 8.9.1.2 LS in

Tdoc Limitation: 0

LS in. For LSes that need action or has impact beyond taking into account by CR rapporteurs: One tdoc by contact company (one company) to address the LS and potential reply is considered Rapporteur Input and may be provided. Open Issues see R2-2201785

RLM/BFD relaxation (wait for RAN4)

OI 3.4: Granularity for RLM/BFD relaxation enable/disable (e.g. per-UE/CG/Serving cell)

OI 3.5: How to provide the criteria configuration for RLM relaxation and BFD relaxation for low mobility criterion?

OI 3.6: How to provide the criteria configuration for RLM relaxation and BFD relaxation for serving cell quality criterion?

OI 3.7: How to evaluate the low mobility criterion for RLM/BFD relaxation?

OI 3.8: How to evaluate the serving cell quality criterion for RLM/BFD relaxation?

PDCCH Skip (Wait for RAN1)

OI 4.4: In case UE cannot monitor DCP due to PDCCH skipping, whether a) Physical layer of UE reports a value of 1 for Wake-up indication bit to higher layer or b) Physical layer of UE does not report Wake-up indication bit to higher layer.

* [Post117-e][083][ePowSav] LS on RLM BFD relaxation (vivo)

Scope: Offline to send LS for Info to R4 on R2 progress of RLM BFD relxation, can discuss if it should be a reply LS.

Intended outcome: Approved LS out

Deadline: Short Post

[R2-2202112](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202112.zip) LS on UE capability for paging enhancement (R1-2200768; contact: Ericsson) RAN1 LS in Rel-17 To:RAN2

* Noted

[R2-2202115](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202115.zip) LS on Paging Enhancement (R1-2200800; contact: MediaTek) RAN1 LS in Rel-17 To:RAN2

- MTK think most of these are included in the CRs

* Noted

[R2-2202168](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202168.zip) LS on signalings for enabling RLM and BFD relaxation in R17 UE power saving (R4-2202769; contact: vivo) RAN4 LS in Rel-17 To:RAN2 Cc:RAN1

- Chair wonder what this means to R4: The RLM/BFD relaxation is enabled by explicit signalling. vivo think it is clear that R4 intends enable / disable the feature = configuration. Nokia think R4 didn’t conclude on this.

- Xiaomi wonder if the capability is separate for RLM BFD. Vivo think this was not clarified in R4.

* Noted

[R2-2203982](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203982.zip) LS on RLM/BFD relaxation for NR UE power saving enhancements (R4-2206790; contact: MediaTek) RAN4 LS in Rel-17 To:RAN2

- Take into account in the CR discussions, to the extent possible.

- vivo clarify that in discussions there were comments to wait for R4, but now R4 has indicated this we don’t need to wait.

- vivo think we can reply now

- CATT wonder if BFD case will be concluded by R4. MTK think R4 is still discussing but hope to conclude.

* Noted, Take into account in the CR discussions.

[R2-2202306](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202306.zip) Discussion on reply LS on signaling for RLM BFD relaxation vivo discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

#### 8.9.1.3 CRs and Rapporteur Resolutions

Tdoc Limitation: 0.

CR Rapporteurs to provide running CRs, potentially updated, and Provide resolution proposals to Rapporteur Handled Open Issues. See also R2-2201785:

PEI and Subgrouping - OI 1.10: Modifications of the content and location of PEI configurations (based on RAN1 progress),

OI 1.11: It is FFS how to extend for DCI\_format 2\_7. Wait for further RAN1 input.

OI 1.12: Whether to add the note according to RAN1 agreement: PEI-O can be configured by network to be placed close to or overlapped with an earlier SS burst before its associated POs.

OI 1.13: FFS how to number the PDCCH monitoring occasions for PEI.

OI 1.14: FFS whether to have a separate clause for subgrouping or merge it into the previous clause for PEI in 7.x as a subclause (e.g. 7.x.y).

OI 1.15: Whether we need a note in spec on this agreement: “R2 assumes that all the cells within the registration area supports the same number of CN assigned subgroups, i.e. no remapping of CN assigned group ID to RAN subgroup ID”

OI 1.16: Detailed parameter alignment between TS38.304 and TS 38.331.

TRS / CSI-RS - OI 2.6: RAN2 to wait for further RAN1 input on whether TRS/CSI-RS configuration can be split as common and TRS specific part

OI 2.7: FFS if scramblingID is per TRS resource set, or per TRS resource

OI 2.8: FFS: the number of configured TRS resource sets is not larger than the number of actual transmitted SSBs determined according to ssb-PositionsInBurst in SIB1.

OI 2.9: Whether/Which part related to TRS/CSI-RS needs to be captured in TS 38.304.

OI 2.10: Detailed parameter alignment between TS38.304 and TS 38.331.

PDCCH Skip - OI 4.2: How to capture searchSpaceSwitchTimer-r17 is FFS as the granularity is FFS.

OI 4.3: How to capture PDCCHSkippingDurationList and PDCCHSkippingDuration are FFS as the granularity is FFS.

UE cap - OI 5.4: How to capture PDCCH monitoring adaptation capabilities in RAN2 TS?

* [Post117-e][084][ePowSav] UE capabilities (Intel)

Scope: Reflect progress including R2 117-e. CR Endorsement

Intended outcome: Endorsed CRs or draft CRs for Merge

Deadline: EOM (if possible)

* [Post117-e][085][ePowSav] 38331 CR (CATT)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][086][ePowSav] 38304 CR (vivo)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][087][ePowSav] 38300 CR (Huawei)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

[R2-2202307](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202307.zip) Introduction of ePowSav in TS 38.304 vivo (Rapporteur) CR Rel-17 38.304 16.7.0 0227 - B NR\_UE\_pow\_sav\_enh-Core

[R2-2202308](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202308.zip) Discussion on type-3 open issues in TS 38.304 (Rapporteur resolutions) vivo discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2203058](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203058.zip) Introduction of ePowSav in TS 38.331 CATT CR Rel-17 38.331 16.7.0 2924 - B NR\_UE\_pow\_sav\_enh-Core

[R2-2203232](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203232.zip) Introduction of UE power saving enhancements In 38.300 Huawei, HiSilicon CR Rel-17 38.300 16.8.0 0417 - B NR\_UE\_pow\_sav\_enh-Core

### 8.9.3 Open Issues

#### 8.9.3.1 Pre-discussions

Tdoc Limitation: 0.

Pre117-e discussions to gather company input on specific Open Issues See R2-2201785

PEI and paging subgrouping

OI 1.1: How to indicate whether UE monitor PEI in last used cell or any other cells?

OI 1.2: Identify valid cases where UE is unable to monitor subgroup PEI configured by network. Then decide if there can be any rule for subgroup PEI monitoring, or UE simply monitor paging as per legacy.

OI 1.3: RAN2 assumes that PEI can be used “without” subgrouping. FFS whether the bits in the PEI for subgrouping then need to have any particular meaning, or whether this would be done by just having one subgroup.

TRS / CSI-RS

OI 2.1 RAN2 to confirm TRS/CSI-RS can be applied to eDRX UEs.

OI 2.2: Whether / how to address the delay required for updating a TRS/CSI-RS configuration due to the eDRX acquisition period (1024 H-SFN)

OI 2.3: A UE which acquired SIB-X with a TRS/CSI-RS configuration but didn’t yet receive an associated L1-based availability indication considers the configured TRS/CSI-RS as [FFS: “unavailable” or “available”]

OI 2.4: Aspects on SIB-X sizing and segmentation: Can segmentation be avoided? If not, how to segment?

OI 2.5: If a UE acquired SIB-X with a TRS/CSI-RS configuration but didn’t yet receive an associated L1-based availability indication, should UE consider the configured TRS/CSI-RS as “unavailable” or “available”?

BFR-BFD relaxation

OI 3.1: Can UE start/stop RLM/BFD relaxation by itself if it meets/fails the relaxation criteria?

OI 3.2: Should UE report fulfilment or not (entry/exit) to network for RLM/BFD relaxation?

OI 3.3: Should NW be able to enable/disable RLM/BFD relaxation with explicit indication irrespective if the RLM/BFD relaxation criteria is configured or not?”

UE caps

OI 5.1: How to capture UE AS capabilities for PEI/subgrouping in RAN2 TS?

OI 5.2: For TRS/CSI-RS occasion support in Idle and inactive mode, should gNB need to know UE support it?

OI 5.3: UE AS capabilities for RLM/BFD relaxation

Companies to provide input into the following discussion:

[Pre117-e][004][ePowSav] PEI and paging subgrouping Open Issues Input (MediaTek)

[Pre117-e][005][ePowSav] TRS / CSI-RS Open Issues Input (CATT)

[Pre117-e][006][ePowSav] BFR-BFD relaxation Open Issues Input (vivo)

[Pre117-e][007][ePowSav] UE caps Open Issues Input (Intel)

[R2-2202309](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202309.zip) Summary of [Pre117-e][006][ePowSav] RLM BFD relaxation (vivo) vivo discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core Late

DISCUSSION

- Nokia think Network need to know when the UE is doing relaxation or not. Nokia think KPIs in connected mode are very important. Huawei agrees. Ericsson agrees and think the reporting could be configurable. ZTE think this impacts network performance, if possible would like to have explicit indication (could be e.g. MAC CE).

P1P2

- QC think P2 is not needed. UE will respect the criteria, and this status doesn’t need to be reported. CATT, LG agrees. Vivo agrees as well. Samsung agrees

- CATT think we should not report, think the network should be able to indicate to the UE to stop relaxation. QC think this can be achieved with RRC.

- APPLe are concerned about overhead.

- MTK think that signalling will increase power consumption and defeat the purpose.

Chair proposes

- a) UE can start/stop RLM/BFD relaxation by itself if it meets/fails the relaxation criteria.

- b) The feature is configured by RRC dedicated signalling, this is the only enable disable function that is supported.

Nokia voices a sustained objection

Working Agreement:

* UE can start/stop RLM/BFD relaxation by itself if it meets/fails the relaxation criteria.
* The feature is configured by RRC dedicated signalling, this is the only enable disable function that is supported.

Continue offline, on detailed aspects, configuration etc, and whether a Reply LS is needed.

[R2-2202664](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202664.zip) Summary report of [Pre117-e][007][ePowSav] UE capabilities Intel Corporation discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core Late

DISCUSSION

P1

- Chair asks if we can then go with PEI + subgrouping

- CATT think this should not be done. Vivo agrees.

- QC can compromise and think PEI + UEID can be one capability, UEID is quite simple and involves just RAN.

- Intel think that if UE support only PEI and network configures PEI + subgrouping, it doesn’t work.

P4P5

- Ericsson think P5 is useful. Huawei Apple and QC think no.

P67

- Huawei apple xiaomi and QC think separate is better

- QC think this need to be per FR, clearly BFD could be somewhat different for FR1 and FR2 .. Intel think this means per band. Huawei support per FR. Ericsson think the algorithm is the same why differentiate?

- Huawei wonder if per FR means different per FR2-1 and FR2-2. Intel think principels for FR2-2 is discussed in 71G WI.

* PEI + UEID subgrouping is one capability
* gNB does not need to know the UE capability for TRS/CSI-RS in idle and inactive mode. Introduce R1 29-2 as optional without capability signalling
* Introduce 2 separate capability bits for RLM relaxation feature and for BFD relaxation feature
* The capability bit(s) for RLM and BFD relaxation shall be per UE with FR differentiation

[R2-2202769](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202769.zip) Summary of [Pre117-e][004][ePowSav] PEI and paging subgrouping (MediaTek) MediaTek Inc. discussion Late

DISCUSSION

P3

- Nokia think it is not needed.

- QC has different understanding, Chair think we can make this crystal clear offline and address potential issues.

P6

- ZTE

P7

- Apple think this contradicts what we agreed on UE cap.

P1

- Sequans think this doesn’t work, think that SIB control is too slow and too statistical in nature. Xiaomi agrees.

- Intel believes the cell indication is to adapt to load of the cell.

- CMCC think service is already differentiated based on grouping.

- VDF think this is also about how AMF pages, but think that per cell control at least gives some level of control.

- MTK indicate that SIB control had clear majority support.

Can discuss the next level details offline

P3-P7 Chair wonder whether we can assume that PEI with no subgrouping is implemented by using PEI + UEID subgrouping with one subgroup.

- Ericsson think the RAN1 already agreed the PEI interpretation in case no of subgroups are 0 or 1.

- QC think that UE cannot support PEI without subgrouping given the previous agreement.

Continue offline.

* Network indicates whether UE monitors PEI in last used cell in system information.

[R2-2203059](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203059.zip) Summary of [Pre117-e[005][ePowSav] TRS / CSI-RS Open Issues Input (CATT) CATT discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core Late

DISCUSSION

P1

- OPPO think we have different acquisition for eDRX up to 6h, which may be difficult. May make the feature not useful.

- LGE think that during PTW UE can understand SI change, by SIB modification for eDRX as discussed for redcap.

* A UE which acquired SIB-X with a TRS/CSI-RS configuration but didn’t yet receive an associated L1-based availability indication considers the configured TRS/CSI-RS as “unavailable”.
* RAN2 reuses the existing mechanism used for SIB12 for implementing the SIBX segmentation

Continue disc offline regarding eDRX

#### 8.9.3.2 Invited Input

Company tdocs invited for input on the following open issues

##### 8.9.3.2.1 PEI and paging subgrouping

OI 1.4: RAN2 has a preference to support PEI with both DRX and eDRX; FFS on potential issues (e.g., PEI and PTW).

OI 1.5: FFS on the detailed NAS signalling between AMF and UE for CN assigned subgrouping.

OI 1.6: When AMF has assigned a UE with a Paging subgroup, some signaling should be supported between AMF and gNB(s) to inform gNB(s) about the related subgroup information for paging a UE in RRC\_IDLE/RRC\_INACTIVE. Exact information is FFS. The message(s) and associated design are up to RAN3.

OI 1.7: It is FFS when a UE in RRC\_INACTIVE has been assigned by CN a Paging subgroup, whether some signaling should be introduced between gNBs to inform each other about the UE’s subgroup for RAN paging.

OI 1.8: Handling in scenarios where certain gNB within a RNA does not support CN controlled subgrouping

OI 1.9: When K=1, the PEI configuration can be either (1) subgroupConfig is absent (i.e., PEI without subgrouping) or (2) subgroupConfig is present and subgroupNumPerPO=1. FFS if UE PHY processing for DCI format 2\_7 is the same.

[R2-2203720](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203720.zip) Summary of 8.9.3.2.1 PEI and Paging Subgrouping MediaTek Inc. discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2202279](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202279.zip) Open issues for PEI and paging subgrouping NEC Europe Ltd discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2202285](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202285.zip) Open Issues for PEI and paging subgrouping Samsung Electronics Co., Ltd discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2202286](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202286.zip) UE Identity for paging subgrouping with eDRX Samsung Electronics Co., Ltd discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2202310](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202310.zip) Discussion on remaining open issues on PEI and subgrouping vivo discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2202353](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202353.zip) Discussing on PEI and paging subgrouping Xiaomi Communications discussion

[R2-2202519](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202519.zip) Open Issues in Enhanced NR UE Power Save PEI / Paging Subgrouping Apple discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2202771](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202771.zip) Open Issues for PEI and Paging Subgrouping MediaTek Inc. discussion

[R2-2202881](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202881.zip) PEI and subgrouping remaining issues Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2202882](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202882.zip) Impact of subgrouping on other WGs Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2202993](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202993.zip) Discussion on PEI and paging subgrouping OPPO discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2203036](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203036.zip) R2-22xxxxx Remaining issues on PEI LG Electronics Inc discussion Rel-17

[R2-2203229](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203229.zip) Remaining issues on CN controlled subgrouping Huawei, HiSilicon discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2203231](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203231.zip) PEI with eDRX Huawei, HiSilicon discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2203243](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203243.zip) Considerations on PEI without Subgrouping Configuration ZTE Corporation,Sanechips discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2203244](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203244.zip) Considerations on PEI and Subgrouping Information in Xn and NG interface ZTE Corporation,Sanechips discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2203245](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203245.zip) Considerations on Open Issues of PEI and Subgrouping ZTE Corporation,Sanechips discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2203252](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203252.zip) PEI and paging subgrouping Ericsson discussion

[R2-2203292](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203292.zip) (OI 1.4) Considerations on support of PEI with eDRX Interdigital, Inc. discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2203305](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203305.zip) Remaining issue on PEI mobility Intel Corporation discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2203474](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203474.zip) Handling of gNB not supporting CN-assigned subgrouping Futurewei Technologies discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2203478](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203478.zip) On supporting PEI with eDRX Futurewei Technologies discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

* [004] 22 tdocs Noted

##### 8.9.3.2.2 PDCCH Skip

OI 4.1: Should UE ignore PDCCH skipping (i.e., PDCCH skipping is cancelled) while UL HARQ reTx timer is running?”

[Pre117-e][024][ePowSav] AI summary of AI 8.9.3.2.2 PDCCH Skip (Samsung)

[R2-2203708](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203708.zip) [Pre117-e][024][ePowSav] Summary of AI 8.9.3.2.2 PDCCH Skip (Samsung) Samsung

[R2-2202287](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202287.zip) PDCCH Skipping in RRC\_CONNECTED Samsung Electronics Co., Ltd discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2202311](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202311.zip) Discussion on PDCCH Skipping in RRC\_CONNECTED vivo discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2202883](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202883.zip) UL PUSCH transmission impact on PDCCH skipping Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2202994](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202994.zip) Discussion on PDCCH skipping OPPO discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2203230](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203230.zip) PDCCH skipping while UL reTx timer is running Huawei, HiSilicon discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2203253](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203253.zip) DCI-based power saving adaptation during DRX Active Time Ericsson discussion

* [024] 7 tdocs Noted

8.9.4 UE capabilities

Features / UE caps developed in RAN2. Note that this AI is complementary to AI 8.0.2. Input to this subclasue shall not overlap with any input to previous subclauses.

[R2-2202355](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202355.zip) Discussing on remaining issues of UE capability for paging enhancement Xiaomi Communications discussion

### 8.9.5 Other

Issues not covered elsewhere.

[R2-2202312](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202312.zip) Discussion on TRS availability when SI change vivo discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2202354](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202354.zip) Discussion on remaining issues on UE power saving Xiaomi Communications discussion

[R2-2202779](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202779.zip) Further considerations on UE assistance information CMCC discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2202995](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202995.zip) Discussion on PEI indication determination in RRC INACTIVE OPPO discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2203068](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203068.zip) TRS/CSI-RS configuration in RRC\_CONNECTED DENSO CORPORATION discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2203254](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203254.zip) TRS exposure Ericsson discussion

## 8.10 NR Non-Terrestrial Networks (NTN)

(NR\_NTN\_solutions-Core; leading WG: RAN2; REL-17; WID: RP-211557)

Time budget: 1.5 TU

Tdoc Limitation: 4 tdocs

### 8.10.1 Organizational

LSs, rapporteur inputs and other organizational documents. Rapporteur inputs and other pre-assigned documents in this AI do not count towards the tdoc limitation.

#### 8.10.1.1 LS in

For LSes that need action: one tdoc by contact company to address the LS and potential reply is considered.

Rapporteur input may be provided.

[R2-2202131](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202131.zip) Reply LS on LS on TAC reporting in ULI and support of SAs and FAs for NR Satellite Access (R3-220121/S2-2109337) (R3-221370; contact: Qualcomm) RAN3 LS in Rel-17 To:SA2 Cc:RAN2, CT1

[R2-2202132](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202132.zip) LS on RAN Initiated Release due to out-of-PLMN area condition (R3-221379; contact: Qualcomm) RAN3 LS in Rel-17 To:SA2 Cc:CT1, RAN2

#### 8.10.1.2 CRs

CR Rapporteurs to provide running CRs, potentially updated.

[R2-2202233](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202233.zip) Stg2 running CR - NTN THALES draftCR Rel-17 38.300 16.8.0 NR\_NTN\_solutions

[R2-2202234](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202234.zip) NTN RAN3's stg2 BL CR THALES draftCR Rel-17 38.300 16.8.0 NR\_NTN\_solutions

[R2-2202456](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202456.zip) Draft 331 CR for NR NTN UE capabilities Intel Corporation draftCR Rel-17 38.331 16.7.0 B NR\_NTN\_solutions-Core

[R2-2202457](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202457.zip) Draft 306 CR for NR NTN UE capabilities Intel Corporation draftCR Rel-17 38.306 16.7.0 B NR\_NTN\_solutions-Core

[R2-2203157](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203157.zip) Introduction of Release-17 NTN Ericsson CR Rel-17 38.331 16.7.0 2930 - B NR\_NTN\_enh-Core

[R2-2203385](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203385.zip) Introduction of NTN ZTE corporation,Sanechips CR Rel-17 38.304 16.7.0 0233 - B NR\_NTN\_solutions-Core

[R2-2203425](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203425.zip) Stage 3 NTN running CR for 38.321 - RAN2#117 InterDigital CR Rel-17 38.321 16.7.0 1215 - B NR\_NTN\_solutions-Core

### 8.10.2 User Plane

#### 8.10.2.1 MAC aspects

[R2-2203482](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203482.zip) Remaining MAC issues in NTNs Ericsson discussion Rel-17 NR\_NTN\_solutions-Core

##### 8.10.2.1.1 Open issues

Contributions on open issues listed in R2-2201900. For some aspects the discussion will happen in Pre117 email discussion [103]. For the others, company contributions can be submitted.

Including report of [Pre117-e][103][NTN] MAC open issues (Interdigital)

[R2-2202302](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202302.zip) Discussion on MAC open issues Huawei, HiSilicon discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2202420](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202420.zip) Remaining issues on HARQ process in NTN Spreadtrum Communications discussion Rel-17

[R2-2202546](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202546.zip) UL synchronization and validity timer expiry Apple discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2202547](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202547.zip) UE location and TA reporting Apple discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2202563](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202563.zip) UL synchronization failure in RRC\_CONNECTED Qualcomm Incorporated discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2202613](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202613.zip) Considerations on MAC open issues CMCC discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2202972](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202972.zip) Consideration on MAC open issues ZTE Corporation, Sanechips discussion Rel-17

[R2-2202999](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202999.zip) Discussion on MAC open issues in NTN OPPO discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2203151](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203151.zip) Discussion on TA reporting ITL discussion Rel-17

[R2-2203165](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203165.zip) Discussion on open issues for MAC aspects LG Electronics Inc. discussion NR\_NTN\_solutions-Core

[R2-2203256](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203256.zip) On left open issues for MAC aspects Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2203257](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203257.zip) Discussion on Validity timer expiry and restart Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2203298](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203298.zip) Open issues on MAC aspects Samsung Research America discussion NR\_NTN\_solutions-Core

[R2-2203423](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203423.zip) Remaining MAC open issues in NTN InterDigital discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2203424](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203424.zip) Summary of [Pre117-e][NTN][103] MAC open issues InterDigital discussion Rel-17 NR\_NTN\_solutions-Core Late

##### 8.10.2.1.2 Other RACH aspects

Contributions on other RACH issues.

[R2-2202303](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202303.zip) Discussion on remaining MAC issues Huawei, HiSilicon discussion Rel-17 NR\_NTN\_solutions-Core

##### 8.10.2.1.3 Other MAC aspects

Contributions on other (non RACH) MAC issues.

[R2-2202421](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202421.zip) MAC operation about the validity timer expiry Spreadtrum Communications discussion Rel-17

[R2-2202773](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202773.zip) Remaining MAC Open Issues for NR NTN vivo discussion

[R2-2203076](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203076.zip) Discussion on Left Open Issues of Other MAC Aspects CATT discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2203194](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203194.zip) Remaining MAC issues of NR NTN Xiaomi discussion Rel-17

[R2-2203203](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203203.zip) CG enhancements in NTN Sony discussion Rel-17 NR\_NTN\_solutions-Core R2-2200911

#### 8.10.2.2 RLC and PDCP aspects

[R2-2203481](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203481.zip) Remaining issues for RLC and PDCP in NTNs Ericsson discussion Rel-17 NR\_NTN\_solutions-Core

### 8.10.3 Control Plane

#### 8.10.3.1 Idle/inactive mode aspects

R2-2202394 On reporting of UE location information ZTE corporation, Sanechips discussion Rel-17 NR\_NTN\_solutions-Core Withdrawn

##### 8.10.3.1.1 Open issues

Contributions on open issues listed in R2-2201898. For some aspects the discussion will happen in Pre117 email discussion [102]. For the others, company contributions can be submitted.

Including report of [Pre117-e][102][NTN] Idle mode open issues (ZTE)

[R2-2202235](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202235.zip) WF for UE location during initial access in NTN THALES, Leonardo, Avanti, ESA, Sateliot, Omnispace, Novamint, Hispasat, Gatehouse, Hughes network systems, Inmarsat, Viasat, CTTC, Intelsat, Kepler, Ligado, Magister solutions, SES, Airbus discussion Rel-17 NR\_NTN\_solutions

[R2-2202422](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202422.zip) Discussion on the SIBX acquiring procedure Spreadtrum Communications discussion Rel-17

[R2-2202423](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202423.zip) Acquiring the ephemeris of neighbour cell Spreadtrum Communications discussion Rel-17

[R2-2202466](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202466.zip) Remaining Rel-17 NTN open issues for IDLE mode Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2202548](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202548.zip) NTN-TN idle mode mobility Apple discussion Rel-17 NR\_NTN\_solutions-Core R2-2201179

[R2-2203049](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203049.zip) Measurements and cell reselection Samsung Research America discussion

[R2-2203386](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203386.zip) Report of [Pre117-e][102][NTN] Idle mode open issues (ZTE) ZTE corporation,Sanechips discussion Rel-17 NR\_NTN\_solutions-Core Late

##### 8.10.3.1.2 Other

Contributions on any other issues.

[R2-2202566](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202566.zip) Assistance information for IDLE mode measurements Qualcomm Incorporated discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2202586](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202586.zip) Epoch time and validity time for neighbour satellite ephemeris Lenovo, Motorola Mobility discussion Rel-17

[R2-2202774](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202774.zip) Remaining issues on location-based cell reselection vivo discussion

[R2-2203004](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203004.zip) Discussion on measurement rules for cell re-selection in NTN OPPO discussion Rel-17 NR\_NTN\_solutions-Core

#### 8.10.3.2 RRC aspects

##### 8.10.3.2.1 Open issues

Contributions on open issues listed in R2-2201896. For some aspects the discussion will happen in Pre117 email discussion [101]. For the others, company contributions can be submitted.

Including report of [Pre117-e][101][NTN] RRC open issues (Ericsson))

[R2-2202424](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202424.zip) Discussion on SIB X Spreadtrum Communications discussion Rel-17

[R2-2202467](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202467.zip) Remaining Rel-17 NTN open issues for CONNECTED mode Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2202565](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202565.zip) Open issues in CHO Qualcomm Incorporated discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2202587](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202587.zip) Consideration on open issues for CHO Lenovo, Motorola Mobility discussion Rel-17

[R2-2202775](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202775.zip) Open issues on CHO for R17 NR NTN vivo discussion

[R2-2202886](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202886.zip) Remaining issues on CHO Huawei, HiSilicon discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2203005](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203005.zip) Discussion on the RRC open issues in NTN OPPO discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2203051](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203051.zip) Remaining NTN CHO issues LG Electronics France discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2203067](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203067.zip) Discussion on RRC open issues for NTN Xiaomi Communications discussion

[R2-2203077](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203077.zip) Further Discussion on the Open Issues of CHO CATT discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2203153](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203153.zip) Remaining connected mode aspects for NTN Ericsson discussion

[R2-2203154](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203154.zip) [Pre117-e][NTN][101] RRC open issues Ericsson report NR\_NTN\_enh-Core Late

[R2-2203236](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203236.zip) Remaining open issues of CHO NEC Telecom MODUS Ltd. discussion

[R2-2203301](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203301.zip) Open issues on RRC aspects Samsung Research America discussion NR\_NTN\_solutions-Core

[R2-2203422](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203422.zip) Remaining RRC open issues in NTN InterDigital discussion Rel-17 NR\_NTN\_solutions-Core

##### 8.10.3.2.2 Other

Contributions on any other issues.

[R2-2202455](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202455.zip) Discussion on NR NTN measurement gaps Intel Corporation discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2202564](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202564.zip) SMTC and MG configuration Qualcomm Incorporated discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2202588](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202588.zip) Contents of UE assistance for measurement window and gap configuration in NTN Lenovo, Motorola Mobility discussion Rel-17

[R2-2202614](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202614.zip) Further discussion on intra-NTN mobility CMCC discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2202776](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202776.zip) Discussion on the signaling design for NTN specific information vivo discussion

[R2-2202840](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202840.zip) Network-Based SMTC Configuration in NTN Google Inc. discussion

[R2-2202850](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202850.zip) Discussion on assistance information for SMTC ASUSTeK discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2202853](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202853.zip) Measurement Gap Issues in NTN Google Inc. discussion

[R2-2203006](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203006.zip) Discussion on remaining open issues in connected mode OPPO discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2203066](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203066.zip) Further consideration of initial access Samsung Research America discussion

[R2-2203190](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203190.zip) Location report for TA report and LCS support in connected mode Xiaomi discussion Rel-17

[R2-2203191](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203191.zip) Remaining issues relating to SIBxx and the RRC delay for RRC Release Xiaomi discussion Rel-17

### 8.10.4 UE capabilities

[R2-2203485](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203485.zip) NR NTN UE capabilities Ericsson discussion Rel-17 NR\_NTN\_solutions-Core

#### 8.10.4.1 Open issues

Contributions on open issues listed in R2-2201962. For some aspects the discussion will happen in Pre117 email discussion [104]. For the others, company contributions can be submitted.

Including report of [Pre117-e][104][NTN] UE caps open issues (Intel)

[R2-2202454](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202454.zip) Report of email discussion [Pre117-e][104][NTN] UE caps open issues (Intel) Intel Corporation discussion Rel-17 NR\_NTN\_solutions-Core Late

[R2-2202725](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202725.zip) Remaining Issues of Set2 on NR NTN UE Capabilities CMCC discussion Rel-17 NR\_NTN\_solutions-Core

#### 8.10.4.2 Other

Contributions on any other issues.

[R2-2202459](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202459.zip) Discussion on the difference between GSO and GEO Intel Corporation discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2202887](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202887.zip) Discussion on capabilities for gaps and HARQ Huawei, HiSilicon discussion Rel-17 NR\_NTN\_solutions-Core

## 8.11 NR positioning enhancements

(NR\_pos\_enh-Core; leading WG: RAN1; REL-17; WID: RP-210903)

Time budget: 2 TU

Tdoc Limitation: 3 tdocs

### 8.11.1 Organizational

Rapporteur input. Incoming LS etc. This AI is reserved for rapporteur and organizational inputs; documents in this AI do not count towards the tdoc limitation. For LSes that need action or have impact beyond taking into account by CR rapporteurs: One tdoc by contact company (one company) to address the LS and potential reply is considered Rapporteur Input and may be provided. Related documents and proposed responses from companies other than the contact company should be submitted to the corresponding technical agenda item (and do count towards the tdoc limitation).

Including report of [Pre117-e][613][POS] RAN1 parameter list impact to RRC running CR (Ericsson)

Including report of [Pre117-e][614][POS] Issues requiring RAN1 input (Intel)

[R2-2202164](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202164.zip) LS on SRS for multi-RTT positioning (R4-2202680; contact: Huawei) RAN4 LS in Rel-17 To:RAN1 Cc:RAN2, RAN3

[R2-2202165](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202165.zip) Reply LS on reporting of the Tx TEG association information (R4-2202685; contact: Huawei) RAN4 LS in Rel-17 To:RAN1, RAN2 Cc:RAN3

[R2-2202166](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202166.zip) LS on DRX cycle used in PRS measurement in RRC\_INACTIVE state (R4-2202686; contact: Qualcomm) RAN4 LS in Rel-17 To:RAN2, RAN3 Cc:RAN1

[R2-2202169](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202169.zip) Reply LS on reporting and definition of DL PRS path RSRP (R4-2202780; contact: Nokia) RAN4 LS in Rel-17 To:RAN1, RAN2

[R2-2202405](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202405.zip) Introduction of B2a and B3I signal in BDS system and GNSS Positioning Integrity CATT, CAICT, CMCC, China Telecom, China Unicom, Huawei, HiSilicon, Intel Corporation, ZTE Corporation, CBN, vivo, OPPO, Lenovo, MediaTek Inc, Spreadtrum Communications, Xiaomi. CR Rel-17 36.305 16.4.0 0107 - B NR\_pos\_enh-Core

[R2-2202488](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202488.zip) Open issues list on Rel-17 positioning WI Intel Corporation discussion Rel-17 NR\_pos\_enh-Core

[R2-2202489](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202489.zip) Open issues on stage 2 running CR Intel Corporation discussion Rel-17 NR\_pos\_enh-Core

[R2-2202490](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202490.zip) Running 38.305 CR for Positioning WI on RAT dependent positioning methods Intel Corporation draftCR Rel-17 38.305 16.7.0 B NR\_pos\_enh-Core

R2-2202491 38.305 CR for Positioning WI Intel Corporation CR Rel-17 38.305 16.7.0 0086 - B NR\_pos\_enh-Core Late

[R2-2202492](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202492.zip) Report of [Pre117-e][614][POS] Issues requiring RAN1 input (Intel) Intel Corporation discussion Rel-17 NR\_pos\_enh-Core Late

[R2-2202493](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202493.zip) Draft LS on issues requiring RAN1 input Intel Corporation LS out Rel-17 NR\_pos\_enh-Core To:RAN1 Late

[R2-2202605](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202605.zip) Introduction of R17 PositioningEnh in MAC spec Huawei, HiSilicon CR Rel-17 38.321 16.7.0 1197 - B NR\_pos\_enh-Core

[R2-2202606](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202606.zip) Introduction of R17 PositioningEnh in LTE RRC spec Huawei, HiSilicon CR Rel-17 36.331 16.7.0 4762 - B NR\_pos\_enh-Core

[R2-2202861](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202861.zip) Running CR of 36.305 for GNSS Positioning Integrity InterDigital, Inc. draftCR Rel-17 36.305 16.4.0 B NR\_pos\_enh-Core

[R2-2202862](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202862.zip) Running CR of 38.305 for GNSS Positioning Integrity InterDigital, Inc. draftCR Rel-17 38.305 16.7.0 B NR\_pos\_enh-Core

[R2-2203310](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203310.zip) Running LPP CR for NR positioning enhancements Qualcomm Incorporated draftCR Rel-17 37.355 16.7.0 B NR\_pos\_enh-Core

R2-2203315 Introduction of R17 Positioning Enhancements in LPP Qualcomm Incorporated CR Rel-17 37.355 16.7.0 0332 - B NR\_pos\_enh-Core Late

[R2-2203362](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203362.zip) RAN1 parameter list impact to RRC running CR Ericsson draftCR Rel-17 38.331 16.7.0 B NR\_pos\_enh-Core Late

[R2-2203363](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203363.zip) Report on RAN1 parameter list impact to RRC running CR Ericsson discussion Rel-17 Late

[R2-2203364](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203364.zip) Introduction of Enhanced Positioning feature Ericsson CR Rel-17 38.331 16.7.0 2952 - B NR\_pos\_enh-Core

### 8.11.2 Open issues

No documents should be submitted to 8.11.2. Please submit to 8.11.2.x.

#### 8.11.2.1 Latency enhancements

Enhancements of signalling, and procedures for improving positioning latency of the Rel-16 NR positioning methods, for DL and DL+UL positioning methods.

Including report of [Pre117-e][607][POS] Open issues on positioning latency enhancements (Huawei)

[R2-2202408](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202408.zip) Discussion and TP on areaID for Latency enhancements CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2202487](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202487.zip) On Latency Reduction open issues Intel Corporation discussion Rel-17 NR\_pos\_enh-Core

[R2-2202592](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202592.zip) On remaining issues for latency improvements Apple discussion

[R2-2202603](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202603.zip) Remaining issues on latency and accuracy enhacnement Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2202604](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202604.zip) Summary of [Pre117-e][607][POS] Open issues on positioning latency enhancements (Huawei) Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core Late

[R2-2202858](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202858.zip) Remaining Issues on Latency Reduction InterDigital, Inc. discussion Rel-17 NR\_pos\_enh-Core

[R2-2202922](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202922.zip) MAC CE for pre-MG (de)activation request Samsung discussion Rel-17 NR\_pos\_enh-Core

[R2-2202930](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202930.zip) Remaining issue on positioning latency reduction Xiaomi discussion

[R2-2203042](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203042.zip) Way forward for preconfigured assistance data Fraunhofer IIS; Fraunhofer HHI; Ericsson; discussion

[R2-2203088](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203088.zip) Discussion on latency enhancement vivo discussion Rel-17 NR\_pos\_enh-Core

[R2-2203181](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203181.zip) Discussion on open issues of positioning latency enhancements ZTE discussion

[R2-2203204](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203204.zip) Considerations on positioning measurement report latency Sony discussion Rel-17 NR\_pos\_enh-Core

[R2-2203211](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203211.zip) Discussion of positioning latency enhancement open issues OPPO discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2203462](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203462.zip) Timing Error Group (TEG) definition Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_pos\_enh-Core

#### 8.11.2.2 RRC\_INACTIVE

Methods, measurements, signalling and procedures to support positioning for UEs in RRC\_ INACTIVE state, for UE-based and UE-assisted positioning solutions. UL and DL+UL NR positioning methods and gNB positioning measurements for UEs in RRC\_INACTIVE are treated at lower priority.

Including report of [Pre117-e][609][POS] Open issues on positioning in RRC\_INACTIVE (InterDigital)

[R2-2202338](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202338.zip) Discussion on remaining issues for Positioning in RRC\_INACTIVE state OPPO discussion Rel-17 NR\_pos\_enh-Core

[R2-2202601](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202601.zip) Remaining Issues on RRC\_INACTIVE Positioning Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2202602](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202602.zip) Draft LS on Positioning in RRC\_INACTIVE State Huawei, HiSilicon LS out Rel-17 NR\_pos\_enh-Core To:SA2 Cc:RAN3

[R2-2203089](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203089.zip) Discussion on positioning in RRC\_INACTIVE vivo discussion Rel-17 NR\_pos\_enh-Core

[R2-2203091](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203091.zip) Consideration on the configuration of UL positioning in RRC\_INACTIVE CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2203180](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203180.zip) Discussion on UL positioning configuration in RRC\_INACTIVE ZTE discussion

[R2-2203360](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203360.zip) TP on RRC Impacts and MAC CE design Ericsson discussion Rel-17

[R2-2203443](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203443.zip) Remaining issues for positioning of UEs in RRC\_INACTIVE State Qualcomm Incorporated discussion

[R2-2203444](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203444.zip) [draft] LS on Positioning in RRC\_INACTIVE State Qualcomm Incorporated LS out Rel-17 NR\_pos\_enh R2-2200961 To:SA2 Cc:RAN3

[R2-2203445](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203445.zip) Capturing RRC impacts for RAT dependent Positioning Ericsson draftCR Rel-17 38.331 16.7.0 B NR\_pos\_enh-Core R2-2202048

#### 8.11.2.3 On-demand PRS

Specify UE-initiated and LMF-initiated on-demand transmission and reception of DL PRS for DL and DL+UL positioning for UE-based and UE-assisted positioning solutions.

Including report of [Pre117-e][608][POS] Open issues on on-demand PRS (Lenovo)

[R2-2202236](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202236.zip) Report of [Pre117-e][608][POS] Open issues on on-demand PRS Lenovo, Motorola Mobility discussion Rel-17 NR\_pos\_enh-Core Late

[R2-2202337](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202337.zip) Discussion on remaining issues for on-demand DL-PRS OPPO discussion Rel-17 NR\_pos\_enh-Core

[R2-2202409](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202409.zip) Discussion on the remaining issues of on-demand PRS CATT discussion

[R2-2202859](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202859.zip) Remaining Issues for On-demand PRS InterDigital, Inc. discussion Rel-17 NR\_pos\_enh-Core

[R2-2203169](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203169.zip) Remaining issues for the On demand DL PRS Samsung R&D Institute UK discussion

[R2-2203463](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203463.zip) On-demand PRS Open Issues Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_pos\_enh-Core

#### 8.11.2.4 GNSS positioning integrity

Signalling and procedures to support GNSS positioning integrity determination.

Including report of [Pre117-e][610][POS] Open issues on GNSS positioning integrity (ESA)

[R2-2203034](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203034.zip) UE-aided detection of threat to GNSS systems and assistance data signaling Fraunhofer IIS; Fraunhofer HHI; Ericsson; ESA discussion R2-2200955

[R2-2203090](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203090.zip) Discussion on GNSS positioning integrity vivo discussion Rel-17 NR\_pos\_enh-Core

[R2-2203199](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203199.zip) Reporting of GNSS Positioning Integrity Result Nokia, Nokia Shanghai Bell discussion Rel-17 FS\_NR\_pos\_enh

[R2-2203359](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203359.zip) On remaining GNSS Integrity open issues Ericsson discussion Rel-17

#### 8.11.2.5 A-GNSS enhancements

Including support of BDS B2a and B3I signals and support of NavIC.

[R2-2202402](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202402.zip) Introduction of B2a and B3I signal in BDS system in A-GNSS CATT, CAICT, CMCC, China Telecom, China Unicom, Huawei, HiSilicon, Intel Corporation, ZTE Corporation, CBN, vivo, OPPO, Lenovo, MediaTek Inc, Spreadtrum Communications, Xiaomi. CR Rel-17 37.355 16.7.0 0327 - B NR\_pos\_enh-Core R2-2200298

[R2-2202403](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202403.zip) Introduction of B2a and B3I signal in BDS system in A-GNSS CATT, CAICT, CMCC, China Telecom, China Unicom, Huawei, HiSilicon, Intel Corporation, ZTE Corporation, CBN, vivo, OPPO, Lenovo, MediaTek Inc, Spreadtrum Communications, Xiaomi. CR Rel-17 36.305 16.4.0 0106 - B NR\_pos\_enh-Core R2-2109485

[R2-2202404](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202404.zip) Introduction of B2a and B3I signal in BDS system in A-GNSS CATT, CAICT, CMCC, China Telecom, China Unicom, Huawei, HiSilicon, Intel Corporation, ZTE Corporation, CBN, vivo, OPPO, Lenovo, MediaTek Inc, Spreadtrum Communications, Xiaomi. CR Rel-17 38.305 16.7.0 0084 - B NR\_pos\_enh-Core R2-2109485

[R2-2202607](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202607.zip) Draft running CR for stage2 spec for NAVIC in R17 positioning Huawei, HiSilicon draftCR Rel-17 38.305 16.7.0 B NR\_pos\_enh-Core

#### 8.11.2.6 Accuracy enhancements

Input on the accuracy enhancement objectives led by RAN1.

Including report of [Pre117-e][611][POS] Open issues on positioning accuracy enhancements (CATT)

[R2-2202410](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202410.zip) Report of [Pre117-e][611][POS] Open issues on positioning accuracy enhancements (CATT) CATT discussion Late

[R2-2202593](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202593.zip) On UE Tx TEG association for UL-TDOA via RRC Apple discussion

[R2-2202860](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202860.zip) Remaining Issues for Accuracy Enhancements InterDigital, Inc. discussion Rel-17 NR\_pos\_enh-Core

[R2-2203205](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203205.zip) Considerations on Timing Error aspects Sony discussion Rel-17 NR\_pos\_enh-Core

[R2-2203361](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203361.zip) LPP Remaining Issues on Accuracy enhancements and On-Demand PRS Ericsson discussion Rel-17

#### 8.11.2.7 UE capabilities

Including report of [Pre117-e][612][POS] Open issues on positioning UE capabilities (Intel)

[R2-2202494](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202494.zip) Report of [Pre117-e][612][POS] Open issues on positioning UE capabilities (Intel) Intel Corporation discussion Rel-17 NR\_pos\_enh-Core Late

[R2-2202495](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202495.zip) Running 331 CR for Positioning UE capabilities Intel Corporation draftCR Rel-17 38.331 16.7.0 B NR\_pos\_enh-Core Late

[R2-2202496](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202496.zip) Running 306 CR for Positioning UE capabilities Intel Corporation draftCR Rel-17 38.306 16.7.0 B NR\_pos\_enh-Core Late

### 8.11.3 Other

Any other topics on NR positioning enhancements.

## 8.12 Reduced Capability

(NR\_redcap-Core; leading WG: RAN1; REL-17; WID: RP-211574)

Time budget: 1 TU

Tdoc Limitation: 3 tdocs

### 8.12.1 Organizational

LSs, rapporteur inputs and other organizational documents. Rapporteur inputs and other pre-assigned documents in this AI do not count towards the tdoc limitation.

[R2-2202500](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202500.zip) Running 38.306 CR for the RedCap capablities Intel Corporation draftCR Rel-17 38.306 16.7.0 B NR\_redcap

[R2-2202501](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202501.zip) Running 38.331 CR for the RedCap capablities Intel Corporation draftCR Rel-17 38.331 16.7.0 B NR\_redcap

[R2-2203354](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203354.zip) Introduction of RedCap Ericsson CR Rel-17 38.331 16.7.0 2950 - B NR\_redcap-Core Late

#### 8.12.1.1 LS in

For LSes that need action: one tdoc by contact company to address the LS and potential reply is considered.

Rapporteur input may be provided.

[R2-2202134](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202134.zip) LS reply on the coordination between gNBs supporting RedCap UEs (R3-221396; contact: Ericsson) RAN3 LS in Rel-17 To:RAN2

[R2-2202162](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202162.zip) Reply LS on use of NCD-SSB for RedCap UE (R4-2202674; contact: ZTE) RAN4 LS in Rel-17 To:RAN1 Cc:RAN2

[R2-2202163](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202163.zip) LS on RRM relaxation for Redcap (R4-2202675; contact: vivo) RAN4 LS in Rel-17 To:RAN2

[R2-2202313](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202313.zip) [Draft] Reply LS to RAN4 on RRM relaxation vivo LS out Rel-17 NR\_redcap-Core To:RAN4

#### 8.12.1.2 CRs

CR Rapporteurs to provide running CRs, potentially updated.

[R2-2202314](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202314.zip) Introduction of RedCap in TS 38.321 vivo (Rapporteur) CR Rel-17 38.321 16.7.0 1186 - B NR\_redcap-Core

[R2-2203421](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203421.zip) Introduction of RedCap in TS 38.300 Nokia, Nokia Shanghai Bell CR Rel-17 38.300 16.8.0 0421 - B NR\_redcap-Core

[R2-2203473](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203473.zip) Stage 2 Corrections for RedCap Futurewei Technologies draftCR Rel-17 38.300 16.8.0 NR\_redcap-Core

[R2-2203497](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203497.zip) Introduction of RedCap UEs Ericsson CR Rel-17 38.304 16.7.0 0234 - B NR\_redcap-Core Late

### 8.12.2 Control Plane

#### 8.12.2.1 Idle/inactive mode aspects

##### 8.12.2.1.1 Open issues

Contributions on open issues listed in R2-2201889. For some aspects the discussion will happen in Pre117 email discussion [105]. For the others, company contributions can be submitted.

[R2-2202266](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202266.zip) Details on RRM relaxation Ericsson discussion Rel-17 NR\_redcap-Core

[R2-2202315](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202315.zip) Discussion on RAN4 LS and remaining issues on RRM relaxation vivo, Guangdong Genius discussion Rel-17 NR\_redcap-Core

[R2-2202996](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202996.zip) Left open issue on SI change mechanism for eDRX OPPO discussion Rel-17 NR\_redcap-Core

##### 8.12.2.1.2 Other

Contributions on any other issues.

[R2-2202347](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202347.zip) Cell (re)selection parameters of RedCap UE Fujitsu discussion Rel-17 NR\_redcap-Core

[R2-2202937](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202937.zip) Cell selection criterion for a RedCap UE with 1 Rx branch Samsung discussion Rel-17 NR\_redcap-Core

[R2-2202989](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202989.zip) UE behavior on combineRelaxedMeasCondition2 Samsung discussion Rel-17

[R2-2203350](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203350.zip) On RedCap RRM relaxations in IDLE/INACTIVE Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_redcap-Core

[R2-2203352](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203352.zip) eDRX and system information Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_redcap-Core

#### 8.12.2.2 RRC aspects

##### 8.12.2.2.1 Open issues

Contributions on open issues listed in R2-2201887. For some aspects the discussion will happen in Pre117 email discussion [105]. For the others, company contributions can be submitted.

Including report of [Pre117-e][105][RedCap] CP open issues (Ericsson)

[R2-2202316](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202316.zip) Discussion on remaining issues on RRC aspects for RedCap vivo, Guangdong Genius discussion Rel-17 NR\_redcap-Core

[R2-2202529](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202529.zip) NCD-SSB and handover related aspects Apple discussion Rel-17 NR\_redcap-Core

[R2-2202530](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202530.zip) On the EUTRA handover to NR for RedCap UEs Apple discussion Rel-17 NR\_redcap-Core

[R2-2202654](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202654.zip) On inter-RAT handover for RedCap UEs ZTE Corporation, Sanechips discussion Rel-17 NR\_redcap-Core

[R2-2202677](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202677.zip) RRC open issues on Rel17 RedCap WI Intel Corporation discussion Rel-17 NR\_redcap

[R2-2202997](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202997.zip) Discussion on remaining RRC open issues OPPO discussion Rel-17 NR\_redcap-Core

[R2-2203055](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203055.zip) Inter-RAT mobility from LTE to NR Huawei, HiSilicon discussion Rel-17 NR\_redcap-Core

[R2-2203056](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203056.zip) Access restriction of RedCap UE Huawei, HiSilicon discussion Rel-17 NR\_redcap-Core

[R2-2203140](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203140.zip) Further discussion on NCD-SSB for RedCap UE China Telecommunications discussion Rel-17

[R2-2203355](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203355.zip) Handover from E-UTRA from legacy eNB to legacy gNB Ericsson discussion NR\_redcap-Core

[R2-2203502](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203502.zip) Report for [Pre117-e][105][RedCap] CP open issues Ericsson discussion NR\_redcap-Core Late

##### 8.12.2.2.2 Other

Contributions on any other issues.

[R2-2202289](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202289.zip) SI Request for Redcap UEs Samsung Electronics Co., Ltd discussion Rel-17 NR\_redcap-Core

[R2-2202734](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202734.zip) Discussions on Redcap-specific initial BWPs Xiaomi Communications discussion

[R2-2203030](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203030.zip) System information acquisition by RedCap UEs during handover Qualcomm Incorporated discussion Rel-17 NR\_redcap-Core Late

[R2-2203351](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203351.zip) On RRM relaxations in CONNECTED Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_redcap-Core

### 8.12.3 User Plane

#### 8.12.3.1 MAC aspects

##### 8.12.3.1.1 Open issues

Contributions on open issues listed in R2-2201891. For some aspects the discussion will happen in Pre117 email discussion [106]. For the others, company contributions can be submitted.

Including report of [Pre117-e][106][RedCap] MAC open issues (vivo)

[R2-2202317](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202317.zip) Summary of [Pre117-e][106][RedCap] MAC open issues (vivo) vivo discussion Rel-17 NR\_redcap-Core Late

[R2-2203281](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203281.zip) Early identification capability Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_redcap-Core

##### 8.12.3.1.2 Other

Contributions on any other issues.

### 8.12.4 NCD-SSB aspects

Contributions on NCD-SSB aspects, that might affect multiple specs

[R2-2202318](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202318.zip) Discussion on RAN2 impacts on NCD-SSB and separate initial BWP vivo, Guangdong Genius discussion Rel-17 NR\_redcap-Core

[R2-2202653](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202653.zip) Remaining issues on separate initial BWP and NCD-SSB for RedCap UEs ZTE Corporation, Sanechips discussion Rel-17 NR\_redcap-Core

[R2-2202998](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202998.zip) Left open issues on NCD-SSB OPPO discussion Rel-17 NR\_redcap-Core

[R2-2203057](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203057.zip) Discussion on NCD-SSB aspects for RedCap UE Huawei, HiSilicon discussion Rel-17 NR\_redcap-Core

[R2-2203078](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203078.zip) Discussion on the open issues of NCD-SSB CATT discussion Rel-17 NR\_redcap-Core

[R2-2203505](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203505.zip) Monitoring POs in connected mode when using NCD-SSB Ericsson discussion Rel-17 NR\_redcap-Core Late

[R2-2203508](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203508.zip) C-plane related open issues on NCD-SSB DENSO CORPORATION discussion Rel-17 NR\_redcap-Core

### 8.12.5 UE capabilities

#### 8.12.5.1 Open issues

Contributions on open issues listed in R2-2201893. For some aspects the discussion will happen in Pre117 email discussion [107]. For the others, company contributions can be submitted.

Including report of [Pre117-e][107][RedCap] UE caps open issues (Intel)

[R2-2202497](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202497.zip) Report of [Pre117-e][107][RedCap] UE caps open issues (Intel) Intel Corporation discussion Rel-17 NR\_redcap Late

[R2-2202498](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202498.zip) Updated Running 38.306 CR for the RedCap capablities Intel Corporation draftCR Rel-17 38.306 16.7.0 B NR\_redcap Late

[R2-2202499](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202499.zip) Updated Running 38.331 CR for the RedCap capablities Intel Corporation draftCR Rel-17 38.331 16.7.0 B NR\_redcap Late

R2-2203141 Further discussion on RRM relaxation for RedCap UE China Telecommunications discussion Rel-17 Late

R2-2203142 Further discussion on RRM relaxation for RedCap UE China Telecommunications discussion Rel-17 Late

[R2-2203143](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203143.zip) Further discussion on RRM relaxation for RedCap UE China Telecommunications discussion Rel-17

#### 8.12.5.2 Other

Contributions on any other issues.

## 8.13 SON/MDT

(NR\_ENDC\_SON\_MDT\_enh-Core; leading WG: RAN3; REL-17; WID: RP-201281)

Time budget: 1 TU

Tdoc Limitation: 4 tdocs

### 8.13.1 Organizational

Tdoc Limitation: 0

LS in. For LSes that need action or has impact beyond taking into account by CR rapporteurs: One tdoc by contact company (one company) to address the LS and potential reply is considered Rapporteur Input and may be provided.

[R2-2202116](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202116.zip) LS on UP measurements for Successful Handover Report (R3-212935; contact: Ericsson) RAN3 LS in Rel-17 To:RAN2

[R2-2202117](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202117.zip) Reply LS on UE context keeping in the source cell (R3-212944; contact: Ericsson) RAN3 LS in Rel-17 To:RAN2

[R2-2202118](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202118.zip) LS Reply on the details of logging forms reported by the gNB-CU-CP, gNB-CU-UP and gNB-DU under measurement pollution conditions (R3-214429; contact: Ericsson) RAN3 LS in Rel-17 To:SA5, RAN2

[R2-2202120](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202120.zip) Reply LS on scenarios need to be supported for MRO in SCG Failure Report (R3-216159; contact: Samsung) RAN3 LS in Rel-17 To:RAN2

[R2-2202125](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202125.zip) Reply LS on Area scope configuration and Frequency band info in MDT configuration (R3-221178; contact: Huawei) RAN3 LS in Rel-17 To:RAN2

[R2-2202133](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202133.zip) Reply LS to SA5 on beam measurement reports (R3-221383; contact Ericsson) RAN3 LS in Rel-17 To:SA5 Cc:RAN2

[R2-2202177](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202177.zip) Reply LS on the details of logging forms reported by the gNB-CU-CP, gNB-CU-UP and gNB-DU under measurement pollution conditions (S5-213499; contact: Ericsson) SA5 LS in Rel-17 To:RAN3 Cc:RAN2

[R2-2202178](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202178.zip) Reply LS on Report Amount for M4, M5, M6, M7 measurements (S5-214523; contact: Nokia) SA5 LS in Rel-17 To:RAN3 Cc:RAN2

[R2-2202179](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202179.zip) Reply LS on the details of logging forms reported by the gNB-CU-CP, gNB-CU-UP and gNB-DU under measurement pollution conditions (S5-215493; contact: Ericsson) SA5 LS in Rel-17 To:RAN3 Cc:RAN2

[R2-2202180](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202180.zip) Reply LS on the Beam measurement reports for the MDT measurements (S5-216628; contact: Ericsson) SA5 LS in Rel-17 To:RAN3 Cc:RAN2

[R2-2203029](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203029.zip) Draft Reply LS on Area scope configuration and Frequency band info in MDT configuration Huawei, HiSilicon LS out Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core To:RAN3

[R2-2203468](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203468.zip) Reply LS on user plane measurements in successful handover report Ericsson discussion NR\_ENDC\_SON\_MDT\_enh-Core

### 8.13.2 CRs and Rapporteur Resolutions

Tdoc Limitation: 0.

CR Rapporteurs to provide running CRs, potentially updated, and Provide resolution proposals to Rapporteur Handled Open Issues (directly in the running CR). See also R2-2201991, R2-2202015, and R2-2201986.

[R2-2202706](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202706.zip) Running 38.314 CR for R17 layer 2 measurements CMCC CR Rel-17 38.314 16.4.0 0020 - B NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2203025](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203025.zip) NR RRC CR for introducing R17 MDT Huawei, HiSilicon CR Rel-17 38.331 16.7.0 2922 - B NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2203394](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203394.zip) Introduction of Rel-17 MDT enhancements Nokia, Nokia Shanghai Bell CR Rel-17 37.320 16.7.0 0115 - B NR\_ENDC\_SON\_MDT\_enh-Core Late

[R2-2203470](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203470.zip) Enhancement of data collection for SON Ericsson CR Rel-17 38.331 16.7.0 2865 1 B NR\_ENDC\_SON\_MDT\_enh-Core R2-2200004

### 8.13.3 SON related Open Issues

Including Pre117-e discussions to gather company input on specific Open Issues

Including company input on Open Issues

See also R2-2201991, and R2-2202015

[R2-2202570](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202570.zip) SON Enhancements for CHO Lenovo, Motorola Mobility discussion Rel-17

[R2-2202571](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202571.zip) SON Enhancements for SHR Lenovo, Motorola Mobility discussion Rel-17

[R2-2203010](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203010.zip) Open issues on SHR NEC discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2203210](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203210.zip) Discussion on SON HO left issues OPPO discussion Rel-17 NR\_pos\_enh-Core

#### 8.13.3.1 Pre-discussions

Tdoc Limitation: 0

#### 8.13.3.2 Invited Input

Company input by tdocs

[R2-2202591](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202591.zip) MRO-related remaining open issues Apple discussion

[R2-2202730](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202730.zip) Leftovers for consecutive CHO failures CMCC, CATT discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2202731](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202731.zip) Leftovers for SHR CMCC discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2202732](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202732.zip) Leftovers for MRO for SN CMCC discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2202778](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202778.zip) Discussion on SON related open issues LG Electronics discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2202801](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202801.zip) Discussion on SON Related Open Issues CATT discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2202802](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202802.zip) Discussion on Open Issue in Stage-2 Running CR CATT discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2202971](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202971.zip) Discussion on SHR enhancements vivo discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2202973](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202973.zip) Consideration on SON open issues ZTE Corporation, Sanechips discussion Rel-17

[R2-2203014](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203014.zip) Discussion on SHR related open issues Huawei, HiSilicon discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2203015](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203015.zip) Discussion on SgNB MRO related open issues Huawei, HiSilicon discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2203395](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203395.zip) Detailed information required for MRO for SN change failure Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2203397](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203397.zip) SHR and RLF report generation for same handover Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2203420](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203420.zip) HO related SON changes Qualcomm Incorporated discussion Rel-17

[R2-2203464](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203464.zip) Handover-related SON aspects Ericsson discussion NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2203465](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203465.zip) On PSCell MHI and SCG MRO enhancements Ericsson discussion NR\_ENDC\_SON\_MDT\_enh-Core

### 8.13.4 MDT related Open Issues

Including Pre117-e discussions to gather company input on specific Open Issues

Including company input on Open Issues

See also R2-2201986

#### 8.13.4.1 Pre-discussions

Tdoc Limitation: 0

[R2-2203026](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203026.zip) Pre-meeting discussion report for R17 MDT Huawei discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core Late

#### 8.13.4.2 Invited Input

Company input by tdocs

[R2-2202733](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202733.zip) Leftovers for on-demand SI CMCC, Ericsson, Samsung, CATT, ZTE, Huawei discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2202803](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202803.zip) Discussion on MDT Related Open Issues CATT discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2202974](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202974.zip) Consideration on MDT open issues ZTE Corporation, Sanechips discussion Rel-17

[R2-2203027](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203027.zip) Discussion on MDT related open issues Huawei, HiSilicon discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2203329](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203329.zip) Discussion on logged MDT open issues Ericsson discussion

[R2-2203331](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203331.zip) On Immediate MDT measurements Ericsson, CMCC discussion

[R2-2203396](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203396.zip) Early measurements logging in MDT Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

### 8.13.5 UE Capabilities

Initial discussion on Features / UE caps developed in RAN2, if any. Note that this AI is complementary to AI 8.0.2.

[R2-2202804](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202804.zip) UE Capabilities about SON and MDT Enhanced Features CATT discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2202975](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202975.zip) Consideration on UE capability ZTE Corporation, Sanechips discussion Rel-17

[R2-2203028](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203028.zip) Discussion on UE capabilities for R17 SON and MDT Huawei, HiSilicon discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2203427](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203427.zip) SON MDT UE Capabilities Qualcomm Incorporated discussion Rel-17

### 8.13.6 Others

[R2-2202939](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202939.zip) Discussion on PSCell MHI recording SHARP Corporation discussion

[R2-2202940](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202940.zip) Discussion on SHR in CHO recovery case SHARP Corporation discussion R2-2201229

## 8.14 NR QoE

(NR\_QoE-Core; leading WG: RAN3; REL-17; WID: RP-211406)

Time budget: 0.5 TU

Tdoc Limitation: 3 tdocs

### 8.14.1 General

#### 8.14.1.1 Organizational

Tdoc Limitation: 0

Planning etc

#### 8.14.1.2 LS in

Tdoc Limitation: 0

LS in. For LSes that need action or has impact beyond taking into account by CR rapporteurs: One tdoc by contact company (one company) to address the LS and potential reply is considered Rapporteur Input and may be provided.

Open Issues, see also R2-2202043:

wait for RAN3 progresses on management-based mobility.

wait for RAN3 progresses on whether RAN visible QoE should also be paused or if it is only regular QoE reports.

wait for RAN3 and SA4 progresses on how to define the RVQoE metrics reporting in RRC.

wait for SA4 progresses on whether the application can/would take the RRC segmentation capability into account and whether this need explicit indication.

wait for RAN3 progresses on whether to need separate UE capability for slice-based QoE.

[R2-2202128](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202128.zip) LS on QoE Measurement Session Start and Measurement Session End Indication from the UE (R3-221243; contact: Ericsson) RAN3 LS in Rel-17 To:RAN2 Cc:SA5

- Apple think R3 could also have just relied on measurement reports. Ericsson think the measurement report is sent at the end of the session.

- China Unicom agree w Ericsson, think R2 can just design the signalling.

- Lenovo think the application is running otherwise th network would not configure, this is just for QoE session.

* Noted

[R2-2202137](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202137.zip) LS on RAN3 agreement for management based QoE mobility (R3-221427; contact: ZTE) RAN3 LS in Rel-17 To:RAN2

* Noted

[R2-2202140](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202140.zip) LS on Support for Configuration and Reporting of RAN Visible QoE Measurements (R3-221465; contact: Ericsson) RAN3 LS in Rel-17 To:RAN2 Cc:SA4

- Ericsson indicate that the periodicity is in the CR.

- Huawei suggest to discuss directly in CR discussions. Chair agrees. China Unicom agrees as well.

* Noted

[R2-2202138](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202138.zip) LS on Support for Configuration and Reporting of RAN Visible QoE Measurements (R3-221463; contact: Ericsson) RAN3 LS in Rel-17 To:CT1 Cc:RAN2, SA4

* Noted

[R2-2202139](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202139.zip) LS on Support for Configuration and Reporting of RAN Visible QoE Measurements (R3-221464; contact: Ericsson) RAN3 LS in Rel-17 To:SA4 Cc:RAN2

* Noted

[R2-2203846](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203846.zip) LS Reply on SA4 requirements for QoE (S4-220236; contact: Huawei) SA4 LS in Rel-17 NR\_QoE-Core To:RAN2 Cc:RAN3

- Mainly mobility aspects, take into account

* Noted

[R2-2203847](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203847.zip) LS Reply on maximum container size for QoE configuration and report (S4-220237; contact: Huawei) SA4 LS in Rel-17 NR\_QoE-Core To:RAN2 Cc:RAN3, SA5, CT1

- Lenovo think we may specify then that reports that cannot be transmitted due to large size are dropped. Apple agrees

- Apple think that we then don’t need any capability transfer between AS and Application.

* Noted

[R2-2203848](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203848.zip) LS Reply on RAN visible QoE (S4-220239; contact: Huawei) SA4 LS in Rel-17 NR\_QoE-Core To:RAN2 Cc:RAN3

* Noted

[R2-2203849](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203849.zip) LS Reply on QoE configuration and reporting related issues (S4-220309; contact: Huawei) SA4 LS in Rel-17 NR\_QoE-Core To:RAN3 Cc:RAN2, SA5

* Noted

[R2-2204068](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204068.zip) LS on the specification of AT commands for NR QoE (C1-222058; contact: Ericsson) CT1 LS in Rel-17 TEI17, NR\_QoE-Core To:RAN2, RAN3, SA5 Cc:SA4

* [AT117-e][068][QoE] LS in and LS out (Huawei)

Scope: Take into account LS ins, Suggest impact to TSes (on a high level, details for TS-specific discussions), determine discussion points for online CB if needed, make Reply LSes to the extent needed. Include also LS out(s) as identified by R2 117-e online discussions.

Intended outcome: Report, Approved LS out(s)

Deadline: EOM (preferably offline only)

CLOSED Rapporteur indicate that extension is required in a post discussion

* [Post117-e][068][QoE] LS outs (Huawei)

Scope: Continue [AT117-e][068][QoE], progress can check the LS outs

Intended outcome: Approved LS out(s)

Deadline: Short Post

#### 8.14.1.3 CRs and Rapporteur Resolutions

Tdoc Limitation: 0.

CR Rapporteurs to provide running CRs, potentially updated, provide resolution proposals to Rapporteur Handled Open Issues, see also R2-2202043

* [AT117-e][045][QoE] RRC CR (Ericsson)

Scope: Ph1: Review the CR provided in [R2-2203428](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203428.zip), including the proposed R2 117e New resolutions, including check of previous meeting updates (as there was no formal endorsement).

Ph2: Take into account meeting progress and impact due to Incoming LSes acc to disc [068]. Identify further agreements (and Determine points for discussion if needed). Preferably Offline only.

Intended outcome: Ph2: Report if useful, Agreed CR

Deadline: For online CB W2 Thursday if needed, otherwise short Post Meeting Disc.

CLOSED continued in a Post email discussion

* [Post17-e][045][QoE] RRC CR (Ericsson)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

[R2-2203428](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203428.zip) Introduction of QoE measurements Ericsson CR Rel-17 38.331 16.7.0 2958 - B NR\_QoE-Core

=> Revised in [R2-2203770](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203770.zip)

[R2-2203770](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203770.zip) Introduction of QoE measurements Ericsson CR Rel-17 38.331 16.7.0 2958 1 B NR\_QoE-Core

- Lenovo think RV QoE parts are missing, shall it be included? Chair think we should include as far as possible/reasonable taking into account agreements, with LS reply it should be possible to include.

- Nokia think we have excluded transmission of PDU session ID, but this is still on the cover page, need to be corrected.

* Endorsed w.r.t. included parts (with nok comment above), baseline for further change

[R2-2202871](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202871.zip) 38.300 running CR for Introduction of QoE measurements in NR China Unicom, Huawei, HiSilicon draftCR Rel-17 38.300 16.8.0 B NR\_QoE-Core

[R2-2202623](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202623.zip) Running CR of UE capability for NR QoE CMCC draftCR Rel-17 38.306 16.7.0 B NR\_QoE

Chair Comment: In addition to 38306, and UE cap draft CR for 38331 is needed, to be ready by EOM and for merge into UE caps Mega CRs.

* [AT117-e][069][QoE] UE capabilities CRs (CMCC)

Scope: Reflect progress including R2 117-e. CR endorsement

Intended outcome: Endorsed UE cap CRs (38331 and 38306) for Merge.

Deadline: EOM (offline)

* [Post117-e][070][QoE] 38300 CR (China Unicom)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed Stage-2 CR

Deadline: Short Post

### 8.14.3 Open Issues

#### 8.14.3.1 Pre-discussions

Tdoc Limitation: 0.

Including Pre117-e discussions to gather company input on specific Open Issues see also R2-2202043

Companies to provide input into the following discussion:

[Pre117-e][008][QoE] QoE Open Issues Input (China Unicom)

Treated On-line W1 Thursday

[R2-2202878](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202878.zip) Summary of [Pre117-e][008][QoE] QoE Open Issues Input China Unicom report Rel-17 NR\_QoE-Core Late

DISCUSSION (except P8 which wasn’t treated due to lack of time)

- HW ZTE support all

P5

- QC think we need to check with SA4. Apple agrees. Samsung OPPO Intel CATT agrees

- LG think it is ok

- China Unicom wonder why we need to check with SA4, R2 can decide.

- QC think this need to be per service type. Ericsson Apple OPPO CATT also support per service type.

P6

- QC would like to postpone this.

- LG think it is ok. CU think it has been decided by R3

P7

- QC think each QoE config should be FFS. Think the per QoE config is for area scope control, which is FFS. CATT agrees.

- CU wonders how this would work.

- Apple think RAN2 need to determine if start/stop indication is needed. Think that application would need to inform about start stop otherwise there is no additional information.

- LG don’t know how this indication work. Think that QoE ID need to be explicitly indicated. One bit is not sufficient.

- Chair think indeed application need to be involved.

- Ericsson indicate that in the current CR the meas ID is sent with measurement reports etc, and it should be done the same way foir this case.

- Nokia think that stop indication is not in SA4 TS. CATT think also SA5 specifies start.

P1

- ZTE think this is not needed, would be a rare case. LG think we already agreed that report may be dropped in some cases, and think this would be rare. Think it would require to specify some internal interaction, think we don’t have enough time. Prefer to simply drop. OPPO think the QoE is associated to source cell. Apple don’t want to define special behaviour for SRB and think it is rare.

- Ericsson think this can happen more freq with RRC segmentation, can be sent after the HO, and there are other RRC messages with the same behaviour so it is not complex. CATT QC support P1. QC think there are ways for the network to avoid loss for other cases, but for HO there is no other mechanism. Huawei think it is useful.

- Chair: There is no consensus to have P1, there is indeed some support, and it seems it is not so complex to implement. Can consider in Q2.

P3

- LGE think this should be conditional mandatory, or just optional without signalling, no signalling is needed. QC agree.

- Ericsson think this info can be used to select UEs. Think the frequency of the reports is configured. Lenovo agrees with P3, and think it shouldn’t be mandatory.

P4

- QC think this involves additional memory so it should be optional. OPPO agrees with QC, and think this was the majority view.

- CMCC and Ch Unicom think this is essential for overload scenarios and need to be mandatory. Chair think that all other overload functionality is mandatory and the only reason to make it optional is if it would limit the deployment of the feature.

- LGE ZTE Lenovo support P4

* SRB4 is used to transmit RAN visible QoE measurements.
* A parameter per service type indicating whether UE supports RAN visible QoE capability.
* RAN2 assumes that No UE capability parameters of the alignment of QoE and MDT need to be introduced.
* 1-bit indication added in the MeasurementReportAppLayer message is used to indicate session start/stop for each QoE configuration, sent with Meas ID (as other reports)
* Indication of Session start/stop is configurable per QoE configuration.
* RRC segmentation capability can be optional with UE capability parameter (one extra bit).
* R2 assumes Pause and resume capability is one of basic sub-features of QoE. (This may be revisited in Q2, if UE vendors find that this requirement is a blocker for wide deployment of QoE reporting).

We send LS, primarily to request SA4 and CT1 to take into account, and feedback if there are concerns.

#### 8.14.3.2 Invited Input

Company input on the following Open Issues see also R2-2202043

- Whether and how the gNB resumes or pauses QoE reporting during HO and RRC resume.

- Whether solutions of legacy QoE mobility could be applied to RAN visible QoE and the specific aspects applied only for RAN visible QoE mobility.

* [AT117-e][046][QoE] Invited tdocs Open Issues (Ericsson)

Scope: Consider the invited input, and tdocs provided under 8.14.3.2 excluding issues handled in [R2-2202878](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202878.zip), or in the RRC CR, or under 8.14.4 or issues where we are still waiting for input from other groups (there is overlap in some tdocs). For the invited input and non-excluded contents, determine agreeable parts, discussion points and remaining open issues (if any). Determine need for LS outs if any.

Intended outcome: Report

Deadline: W1 Friday (for online CB W2 Monday).

CLOSED

[R2-2203915](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203915.zip) Feature summary for 8.14.3.2 Ericsson discussion Rel-17 NR\_QoE\_enh-Core

DISCUSSION

P1

- Chair wonder if we can agree that pause is not applicable to RVQoE

- Apple think from TS point of view it is easier to do the opposite, and think a safer approach is to just make Pause applicable.

- LG think we should apply the same behaviour for leg QoE and RV QoE, but would be ok the other way.

- Ericsson think that we should specify acc to use case, think the assumption is that RV QoE data shall be fresh.

- Huawei think it is not complicated either way, but think that Pausing RV QoE may mean something different than for leg QoE, as there is a freshness assumption for RV QoE Data. Simplest and makes sense to not apply. ZTE agrees.

P2

- Ericsson indicate that for Idle all companies agree to discard.

- LG prefer to keep the current beh in the running CR, can report stored QoE report after Inactive.

- Huawei would be ok to just discard, no requirement to store the reports. QC and ZTE agrees.

- Nokia think we have already agreed for Idle. Think that the current running CR captures that reports can be stored, the configuration is kept etc, which would be ok.

- Ericsson agrees that if the configuration is kept then the report doesn’t need to be discarded.

- QC think there may be issues with memory storage, think timer based discard is one way.

* Pause Resume is not applicable to RVQoE
* The UE keeps stored QoE reports (while in Paused state) when going to RRC\_INACTIVE if the UE also keeps the AS QoE configuration. If or when the configuration is released, then stored QoE reports if any are discarded.

[R2-2202622](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202622.zip) Remaining open issue relating QoE CMCC discussion Rel-17 NR\_QoE

[R2-2202828](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202828.zip) Discussion on Pause/Resume QoE Reporting Mobility ZTE Corporation, Sanechips discussion Rel-17

[R2-2202829](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202829.zip) Discussion on RAN Visible QoE Mobility ZTE Corporation, Sanechips discussion Rel-17

[R2-2202857](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202857.zip) Left issues of QoE mobility Qualcomm Incorporated discussion NR\_QoE\_enh

[R2-2202863](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202863.zip) Discussion on Remaining Open Issues CATT discussion NR\_QoE\_enh-Core

[R2-2202935](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202935.zip) Support of MDT and QoE alignment Qualcomm Incorporated discussion NR\_QoE\_enh

[R2-2202986](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202986.zip) Pause and resume under mobility Samsung discussion Rel-17

[R2-2202987](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202987.zip) RAN visible QoE under mobility Samsung discussion Rel-17

[R2-2203038](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203038.zip) Remaining open issues on QoE LG Electronics Inc discussion Rel-17

[R2-2203136](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203136.zip) Discussion on pause and resume of QoE reporting during HO and RRC resume vivo discussion Rel-17 NR\_QoE-Core

[R2-2203137](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203137.zip) Discussion on RAN visible QoE mobility vivo discussion Rel-17 NR\_QoE-Core

[R2-2203209](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203209.zip) Discussion on QoE measurement collection configuration in NR OPPO discussion Rel-17 NR\_QoE-Core

[R2-2203346](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203346.zip) Discussion on open issues for QoE measurement configuration and reporting Huawei, HiSilicon discussion Rel-17 NR\_QoE-Core Late

[R2-2203348](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203348.zip) RAN visible QoE during mobility Huawei, HiSilicon discussion Rel-17 NR\_QoE-Core Late

[R2-2203398](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203398.zip) QMC/MDT alignment and paused QoE handling in HO Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_QoE-Core

[R2-2203430](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203430.zip) RAN Visible QoE measurements Ericsson discussion Rel-17 NR\_QoE-Core

[R2-2203431](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203431.zip) Handling of paused QoE and RVQoE reports during HO and RRC resume Ericsson discussion Rel-17 NR\_QoE-Core

* [046] 17 tdocs Noted

### 8.14.4 UE capabilities

Features / UE caps developed in RAN2. Note that this AI is complementary to AI 8.0.2. Input here should not overlap with input for the previous subclasues.

Includes Company input on the following Open Issues see also R2-2202043: Whether and How AS layer obtains application capability.

* [AT117-e][047][QoE] UE capability (CMCC)

Scope: Treat [R2-2202827](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202827.zip), [R2-2202988](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202988.zip), [R2-2203347](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203347.zip), [R2-2203404](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203404.zip), [R2-2203429](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203429.zip), determine agreeable parts and discussion points. Determine need for LS outs if any.

Intended outcome: Report

Deadline: W1 Friday (for online CB W2 Monday).

CLOSED

[R2-2203924](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203924.zip) Report for [AT117-e][047][QoE] UE capability (CMCC) CMCC discussion Rel-17 NR\_QoE-Core

Discussion

- QC think an LS would be helpful. Ericsson agrees.

- Nokia think we have been focusing on Radio capabilities, and think that a feature need to be coordinated, i.e. that a radio capability also means that the capability is supported on higher layer but how this is done is up to UE impl. Huawei agrees.

- Lenovo don’t see strong need for LS, but ok to send LS to SA4.

- CMCC think we need to send LS to SA4

- QC want to further ask more detailed questions, if different applications has different support for same service type.

* RAN2 assumes that AS layer capability will be indicated to network only if the UE is capable also on higher layers
* RAN2 assumes that how AS layer obtain application capability is based on UE implementation (with no AS spec impact).
* We send LS to SA4 (and cc CT1), can elaborate on detailed Questions offline, if needed.

R2-2203925 Running 38.306 CR of UE capability for NR QoE CMCC draftCR Rel-17 38.306 16.7.0 B NR\_QoE-Core

R2-2203926 Running 38.331 CR of UE capability for NR QoE CMCC draftCR Rel-17 38.331 16.7.0 B NR\_QoE-Core

[R2-2202827](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202827.zip) Discussion on UE Capability for QoE ZTE Corporation, Sanechips discussion Rel-17

[R2-2202988](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202988.zip) Capabilities of AS layer and application layer Samsung discussion Rel-17

[R2-2203347](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203347.zip) AS and application layer interactions for NR QoE UE capabilities Huawei, HiSilicon discussion Rel-17 NR\_QoE-Core Late

[R2-2203404](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203404.zip) UE Capabilities for QMC Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_QoE-Core

[R2-2203429](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203429.zip) UE capabilities for QoE measurements Ericsson discussion Rel-17 NR\_QoE-Core

* [047] 5 tdocs treated

Not Treated

[R2-2203208](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203208.zip) Discussion on QoE measurement collection capability OPPO discussion Rel-17 NR\_QoE-Core

[R2-2202906](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202906.zip) Open issues for QoE capability Qualcomm Incorporated discussion NR\_QoE\_enh

[R2-2202865](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202865.zip) Discussion on UE capabilities for NR QoE CATT discussion NR\_QoE\_enh-Core

### 8.14.5 Other

Issues not covered elsewhere.

[R2-2202551](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202551.zip) Start/stop indication in NR QoE Apple discussion Rel-17 NR\_QoE-Core

## 8.15 NR Sidelink enhancements

(NR\_SL\_enh-Core; leading WG: RAN1; REL-17; WID: RP-202846)

Time budget: 1.5 TU

Tdoc Limitation: 3 tdocs

### 8.15.1 Organizational

Including incoming LSs, rapporteur inputs (e.g. running CR and/or open issues that were not covered by [POST] email discussion and need to be addressed), etc.

[R2-2202204](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202204.zip) Introduction of sidelink DRX capability OPPO CR Rel-17 38.331 16.7.0 2877 - B NR\_SL\_enh-Core Late

[R2-2202205](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202205.zip) Introduction of sidelink DRX capability OPPO CR Rel-17 38.306 16.7.0 0674 - B NR\_SL\_enh-Core Late

[R2-2202391](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202391.zip) Introduction of sidelink DRX capability OPPO CR Rel-17 36.331 16.7.0 4758 - B NR\_SL\_enh-Core Late

[R2-2202474](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202474.zip) Rapporteur Inputs on Stage 2 Open Issues InterDigital (Rapporteur) discussion Rel-17 NR\_SL\_enh-Core

[R2-2202478](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202478.zip) Introduction of eSL in TS.38300 InterDigital (Rapporteur) CR Rel-17 38.300 16.8.0 0405 - B NR\_SL\_enh

[R2-2202712](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202712.zip) RRC running CR for NR Sidelink enhancements Huawei, HiSilicon CR Rel-17 38.331 16.7.0 2902 - F NR\_SL\_enh-Core Late

[R2-2202948](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202948.zip) Running CR of TS 38.321 for Sidelink enhancement LG Electronics France CR Rel-17 38.321 16.7.0 1206 - F NR\_SL\_enh-Core Late

### 8.15.2 SL DRX

Including [POST116bis-e][705].

[R2-2202190](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202190.zip) Discussion on DRX left issues OPPO discussion Rel-17 NR\_SL\_enh-Core

[R2-2202203](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202203.zip) Summary of [POST116bis-e][705][V2X/SL] Open issues on SL DRX (OPPO) OPPO report Rel-17 NR\_SL\_enh-Core Late

[R2-2202388](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202388.zip) Leftover Issue for Sidelink DRX CATT discussion Rel-17 NR\_SL\_enh-Core

[R2-2202430](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202430.zip) Remaining aspects of SL DRX Ericsson discussion Rel-17 NR\_SL\_enh-Core

[R2-2202452](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202452.zip) Discussion on SL DRX remaining issues for unicast ZTE Corporation, Sanechips discussion Rel-17 NR\_SL\_enh-Core

[R2-2202453](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202453.zip) Discussion on TX profile issues for SL DRX ZTE Corporation, Sanechips discussion Rel-17 NR\_SL\_enh-Core

[R2-2202475](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202475.zip) Consideration of the Active Time for Periodic Transmissions InterDigital, Ericsson, vivo, Huawei, HiSilicon, Nokia, ASUSTek, Lenovo, Motorola Mobility, Samsung discussion Rel-17 NR\_SL\_enh-Core

[R2-2202476](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202476.zip) Resource Allocation for DRX InterDigital discussion Rel-17 NR\_SL\_enh-Core

[R2-2202540](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202540.zip) Discussion on remaining issues on SL-DRX Apple discussion Rel-17 NR\_SL\_enh-Core

[R2-2202581](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202581.zip) Remaining MAC issues for SL DRX Lenovo, Motorola Mobility discussion Rel-17

[R2-2202667](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202667.zip) On SL DRX and candidate resource selection Intel Corporation discussion Rel-17 NR\_SL\_enh-Core

[R2-2202713](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202713.zip) Remaining issue on sidelink DRX Huawei, HiSilicon discussion Rel-17 NR\_SL\_enh-Core

[R2-2202764](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202764.zip) Consideration on the different DRX status among RX UEs in SL groupcast Huawei, HiSilicon discussion Rel-17 NR\_SL\_enh-Core

[R2-2202900](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202900.zip) TP for NOTE-based approach for Q2.3.3-1b in [POST116bis-e][705] OPPO discussion Rel-17 NR\_SL\_enh-Core Late

[R2-2202901](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202901.zip) TP for normative-text-based approach for Q2.3.3-1b in [POST116bis-e][705] OPPO discussion Rel-17 NR\_SL\_enh-Core Late

[R2-2202902](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202902.zip) TP for NOTE-based approach for Q2.3.3-2b in [POST116bis-e][705] OPPO discussion Rel-17 NR\_SL\_enh-Core Late

[R2-2202903](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202903.zip) TP for normative-text-based approach for Q2.3.3-2b in [POST116bis-e][705] OPPO discussion Rel-17 NR\_SL\_enh-Core Late

[R2-2202941](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202941.zip) Discussion on remaining issues for SL DRX LG Electronics France discussion NR\_SL\_enh-Core

[R2-2202984](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202984.zip) consideration on the remaining issues for SL DRX LG Electronics France discussion Rel-17

[R2-2203047](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203047.zip) SL-DRX negotiation procedure in unicast vivo discussion Rel-17

[R2-2203048](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203048.zip) Unsolved issues on SL-DRX vivo discussion Rel-17

[R2-2203082](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203082.zip) Remaining issues for SL DRX Samsung Research America discussion

[R2-2203147](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203147.zip) Discussion on sidelink DRX open issues Xiaomi discussion

[R2-2203152](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203152.zip) Resource selection considering SL DRX ITL discussion Rel-17

[R2-2203159](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203159.zip) Summary of [POST116bis-e][707][V2X/SL] Open issues on IUC (LG) LG (Rapporteur) discussion Rel-17 NR\_SL\_enh-Core Late

[R2-2203182](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203182.zip) SL DRX CP aspects Lenovo, Motorola Mobility discussion NR\_SL\_enh-Core

[R2-2203200](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203200.zip) Handling of sidelink mode-1 grant drop due to misalignment with SL-DRX Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SL\_enh-Core

[R2-2203274](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203274.zip) Down-selection for SL DRX configuration for GC/BC with multiple QoS profiles associated with the same L2 DST ID Nokia, Nokia Shanghai Bell discussion NR\_SL\_enh-Core

### 8.15.3 Resource allocation enhancements RAN2 scope

Including [POST116bis-e][706] and [POST116bis-e][707].

[R2-2202191](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202191.zip) Discussion on power saving resource allocation enhancement OPPO discussion Rel-17 NR\_SL\_enh-Core

[R2-2202192](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202192.zip) Discussion on inter-UE coordination OPPO discussion Rel-17 NR\_SL\_enh-Core

[R2-2202387](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202387.zip) IUC Request and Response MAC CE Design CATT discussion Rel-17 NR\_SL\_enh-Core

[R2-2202431](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202431.zip) MAC CE design of inter-UE coordination Ericsson discussion Rel-17 NR\_SL\_enh-Core

[R2-2202432](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202432.zip) Remaining issues for power saving resource allocation Ericsson discussion Rel-17 NR\_SL\_enh-Core

[R2-2202451](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202451.zip) Discussion on Inter-UE coordination ZTE Corporation discussion Rel-17 NR\_SL\_enh-Core

[R2-2202477](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202477.zip) On the Allowable Cast Types for IUC InterDigital discussion Rel-17 NR\_SL\_enh-Core

[R2-2202541](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202541.zip) Discussion on Inter-UE Coordination Apple discussion Rel-17 NR\_SL\_enh-Core

[R2-2202542](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202542.zip) Discussion on power saving resource selection Apple discussion Rel-17 NR\_SL\_enh-Core

[R2-2202582](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202582.zip) Open issues on SL inter-UE coordination Lenovo, Motorola Mobility discussion Rel-17

[R2-2202668](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202668.zip) Inter-UE coordination open issues Intel Corporation discussion Rel-17 NR\_SL\_enh-Core

[R2-2202823](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202823.zip) Summary of [POST116bis-e][706][V2X/SL] Open issues on power-saving resource allocation, Phase 2 vivo (Rapporteur) discussion Late

[R2-2202866](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202866.zip) Consideration on Inter-UE coordination Huawei, HiSilicon discussion

[R2-2202942](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202942.zip) Discussion on Inter-UE Coordination LG Electronics France discussion NR\_SL\_enh-Core

[R2-2203046](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203046.zip) Latency bound and remaining PDB related to inter-UE coordination MAC CE not covered by open issue list vivo discussion Rel-17

[R2-2203083](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203083.zip) Partial-sensing/random selection based resource allocation in SL DRX Samsung Research America discussion

[R2-2203084](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203084.zip) Introduction of IUC MAC CE Samsung Research America discussion

[R2-2203207](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203207.zip) Whether UE-A in IUC can be in mode 1 or mode 2 Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SL\_enh-Core

[R2-2203472](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203472.zip) Discussion on Inter-UE Coordination Qualcomm Finland RFFE Oy discussion

## 8.16 NR Non-Public Network enhancements

(WI NG\_RAN\_PRN\_enh-Core; leading WG: RAN3; REL-17; WID: RP-202363)

Time budget: 0 TU

Tdoc Limitation: 1 tdocs

* [AT117-e][048][eNPN] Open Issues (Nokia)

      Scope: Treat tdocs on open issues: [R2-2202208](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202208.zip), [R2-2202620](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202620.zip), [R2-2202832](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202832.zip), [R2-2202855](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202855.zip), [R2-2202889](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202889.zip), [R2-2202896](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202896.zip), [R2-2202898](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202898.zip), [R2-2203075](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203075.zip), [R2-2203264](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203264.zip), [R2-2203447](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203447.zip), Also, review the CR in [R2-2202636](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202636.zip) and consider the open issues listed there, for UE capabilities.

      Intended outcome: Report

      Deadline: W1 Friday (for on-line CB W2 Monday).

CLOSED

[R2-2203830](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203830.zip) Report from [AT117-e][048][eNPN] Open Issues (Nokia) Nokia (Rapporteur) discussion Rel-17 NG\_RAN\_PRN\_enh-Core

DISCUSSION

P1

- LGE think 12 may be too restrictive in some cases

- QC think we should just agree the max allowed by SIB size, 43 ...

- OPPO think we should consider use case, and the use case to have many GINs seems not clear.

P3.2

- intel think this was agreed last meeting, just the addition of “For SNPN capable UE” is new.

- LG think we need to agree to 3.2 as we agreed 3.1, think the previous agreement was for PLMN.

- Huawei prefer to remove SNPN capable UE as there is no single capability

* Max no of GINs = 24
* It is agreed (the optimization) that a field supportedGINs being absent for an SNPN indicates that a given SNPN does not support any GIN.
* It is agreed (the optimization) that gins-PerSNPN is absent when the cell only supports a single SNPN.
* Agreed to Implement Proposal 3 of [R2-2202896](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202896.zip) and Proposal 4 of [R2-2203447](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203447.zip) in the running CR for 38.306.
* Confirm Proposal 4 of [R2-2202896](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202896.zip) (Add the following to the existing capability for IMS emergency call: “For SNPN capable UE, it is mandatory to support IMS emergency call over SNPN for UEs that are IMS voice capable over SNPNs”.)

Next CRs, offline (UE cap EOM, Others short Post)

### 8.16.1 Organizational

Rapporteur input, incoming LS etc. Running CRs.

LS in

[R2-2202174](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202174.zip) Reply to LS on support of PWS over SNPN (S1-214049; contact: Nokia) SA1 LS in Rel-17 To:SA3 Cc:SA2, CT1, RAN2, RAN3, SA, CT, RAN

* [048] Noted

[R2-2202175](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202175.zip) Reply LS on limited service availability of an SNPN (S2-2109254; contact: Qualcomm) SA2 LS in Rel-17 To:CT1, RAN2 Cc:SA1

* [048] Noted

CRs

* [Post117-e][071][eNPN] 38300 38331 CRs (Nokia)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CRs

Deadline: Short Post

* [Post117-e][072][eNPN] 38304 CRs (Qualcomm)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [AT117-e][073][eNPN] UE capabilities CRs (Intel)

Scope: Reflect progress including R2 117-e. CR endorsement

Intended outcome: Endorsed CR(s) for merge

Deadline: EOM (offline)

[R2-2202636](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202636.zip) Introduction of Rel-17 NPN UE capability Intel Corporation CR Rel-17 38.306 16.7.0 0684 - B NG\_RAN\_PRN\_enh-Core

[R2-2202689](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202689.zip) Introduction of Enhancements for Private Networks Qualcomm Incorporated CR Rel-17 38.304 16.7.0 0230 - B NG\_RAN\_PRN\_enh-Core

[R2-2203072](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203072.zip) Introducing NPN enhancements: Credential Holders, Onboarding, IMS emergency, and PWS support in SNPNs Nokia, Nokia Shanghai Bell CR Rel-17 38.300 16.8.0 0414 - B NG\_RAN\_PRN\_enh-Core

[R2-2203073](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203073.zip) Introducing NPN enhancements: Credential Holders, Onboarding, and IMS emergency support in SNPNs Nokia, Nokia Shanghai Bell CR Rel-17 38.331 16.7.0 2925 - B NG\_RAN\_PRN\_enh-Core

R2-2203960 Introduction of UE capabilities for Rel-17 eNPN Intel Corporation draftCR Rel-17 38.306 16.7.0 B NG\_RAN\_PRN\_enh-Core

Work plan

[R2-2203074](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203074.zip) RAN2 Work Plan for Enhancement for Private Network Support for NG-RAN Nokia, China Telecom (Rapporteurs) Work Plan Rel-17 NG\_RAN\_PRN\_enh-Core

* Noted (wo presentation)

### 8.16.2 Issues and Corrections

Address Open Issues: Finalize encoding of GINs in SIB, settle max no of GINs per Cell, finalize UE capabilites.

[R2-2202208](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202208.zip) Remaining Key Issues for eNPN OPPO discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2202620](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202620.zip) Discussion on open issues for NPN CMCC discussion Rel-17 NG\_RAN\_PRN\_enh

[R2-2202832](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202832.zip) Remaining issue of GIN design for eNPN China Telecom discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2202855](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202855.zip) Discussion on open issues in eNPN Samsung R&D Institute India discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2202889](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202889.zip) Discussion on GINs for SNPN Huawei, HiSilicon discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2202896](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202896.zip) Discussion on open issues for R17 NPN vivo discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2202898](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202898.zip) Consideration on the remaining eNPN issues ZTE Corporation, Sanechips discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2203075](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203075.zip) Remaining open issues of eNPN Nokia, Nokia Shanghai Bell discussion Rel-17 NG\_RAN\_PRN\_enh-Core

[R2-2203264](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203264.zip) Resolving open issues for eNPN LG Electronics France discussion Rel-17

[R2-2203447](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203447.zip) Remaining details for eNPN Ericsson discussion Rel-17 NG\_RAN\_PRN\_enh-Core

* [048] 10 tdocs are Noted

## 8.17 NR feMIMO

(NR\_feMIMO-Core; leading WG: RAN1; REL-17; WID: RP-212535)

Time budget: 0.5 TU

Tdoc Limitation: 3 tdocs

### 8.17.1 General

#### 8.17.1.1 Organizational

Tdoc Limitation: 0

Planning etc

#### 8.17.1.2 LS in

Tdoc Limitation: 0

LS in. For LSes that need action or has impact beyond taking into account by CR rapporteurs: One tdoc by contact company (one company) to address the LS and potential reply is considered Rapporteur Input and may be provided.

[R2-2203893](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203893.zip) LS on feMIMO RRC parameters (R1-2202720; contact: Ericsson) RAN1 LS in Rel-17 NR\_feMIMO-Core To:RAN2 Cc:RAN3, RAN4

- Ericsson indicate that there were some questions to this LS in the offline, but not all conclusions regarding this is in the report of offline. Suggestions seems to be acceptable at least on high level.

- Chair: take into account to extent reasonable in the CR. Can refrain from iml or have eidtors notes for uncertain things.

* Noted

[R2-2203894](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203894.zip) LS on RRC parameters update for IE SSB-MTCAdditionalPCI-r17 (R1-2202725; contact: vivo) RAN1 LS in Rel-17 NR\_feMIMO-Core To:RAN2

- Chair: take into account for RRC CR.

- Intel wonder if it is correct understanding to just change field name. Ericsson think there is a history and the change is to avoid confusion. OPPO think indeed the name change may involve some function change. Can Check Offline

* Noted

[R2-2204011](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204011.zip) LS response on MPE information signaling (R1-2202732; contact: Nokia) RAN1 LS in Rel-17 NR\_feMIMO-Core To:RAN2 Cc:RAN4

- Nokia think this overlaps with [R2-2203893](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203893.zip).

- Intel wonder if additional PCI info is needed for MPE resource pool. Nokia think that apply to ICBM fwk means that additional PCI info applies. Intel wonder if per pool or per resource and if for SSB or for also CSI-RS. Nokia think it can be per pool or resource. LGE: per resource pool, and either per SSB or CSI RS.

- Xiaomi wonder if MPE impacts are applicable to mTRP. Nokia think this is not concluded in R1. Samsung: From 4044 it seems mTRP is not supported. Intel would agree that it is not supported.

* Noted

[R2-2204044](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204044.zip) Follow upLS on feMIMO RRC parameters (R1-2202765; contact: Ericsson) RAN1 LS in Rel-17 NR\_feMIMO-Core To:RAN2

- Ericsson think this mainly impact the MAC CE and is taken into acct in MAC discussion. Samsung confirms this

- Nokia think no consensus in R1 means that R2 may decide.

* Noted

[R2-2204076](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204076.zip) LS on Rel-17 NR FeMIMO for TS 38.300 RAN1 LS in Rel-17 NR\_feMIMO-Core To:RAN2

* Take into account in 38300 CR, offline CR approval in Post discussion
* Noted

#### 8.17.1.3 CRs and Rapporteur Resolutions

Tdoc Limitation: 0.

CR Rapporteurs to provide running CRs, potentially updated, provide resolution proposals to Rapporteur Handled Open Issues, See also R2-2202001

RRC:

- whether pathloss reference and power control parameters of PUSCH/PUCCH/SRS should be associated with Joint TCI state

- How to refer to a BWP/CC, where Joint/DL and UL TCI state pool are defined

- On SRS partial sounding, there is a parameter ‘StartRBIndex’ that is missing in ASN1. In 38.211, there is: ”k\_F∈{0,1,…,P\_F-1} is given by the higher-layer parameter StartRBIndex if configured, otherwise k\_F=0”.

- Many maxNRof values are not added in the CR(e.g. rows 24,25). Suggestion: rapporteur provides in next version towards 117

- Row 18 “PDSCH configuration for each CC/BWP. The reference CC/BWP includes the Rel-17 TCI state pool (a list of TCI states) for PDSCH” not implemented. Suggestion: rapp provides in next version towards 117

- Rows 16,17 DLorJOint-TCIState-Id-r17 not implemented in CSI-AssociatedReportConfigInfo or NZP-CSI-RS-Resource. Suggestion: rapp provides in next version towards 117

* [Post117-e][098][feMIMO] 38300 CR (Samsung)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][009][feMIMO] 38331 CR (Ericsson)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][016][feMIMO] 38321 CR (Samsung)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

[R2-2202926](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202926.zip) Introduction of feMIMO Samsung CR Rel-17 38.321 16.7.0 1204 - B NR\_feMIMO-Core

[R2-2203032](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203032.zip) Introduction of Release-17 feMIMO Ericsson CR Rel-17 38.331 16.7.0 2923 - B NR\_feMIMO-Core

[R2-2203033](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203033.zip) FeMIMO L1 parameters with RAN2 notes Rel-17 NR Ericsson Limited other Rel-17 NR\_feMIMO-Core

[R2-2203035](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203035.zip) RRC CR rapporteur open issue document Ericsson discussion Rel-17 NR\_feMIMO-Core

* [009] 2 tdocs Noted

### 8.17.3 Open Issues

#### 8.17.3.1 Pre-discussions

Tdoc Limitation: 0.

Pre117-e discussions to gather company input on specific Open Issues See also R2-2202001

RRC:

- pucch-PowerControlSet to be aligned with the corresponding MAC CE design, R2 action: develop common understanding on the operation.

- BFD/BFR RRC configuration is not implemented. Rows 60-62, 67. R2 action: develop common understanding on the operation.

- the detail SSB configuration of aTRP, and including whether such IE is also applicable for mTRP (4.1), why put it under SSB-MTC (4.2), wheher there is a disconnect on the application of PUCCH-SpatialRelationInfo (4.4.),

- How to indicate serving cells, which will share common TCI state i.e. share the MAC CE and DCI from one reference serving cell (this issue is also related to the configuration of beamAppTime-r17).

Companies to provide input into the following discussion:

[Pre117-e][009][feMIMO] feMIMO Open Issues Input (Ericsson)

[R2-2203050](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203050.zip) [Pre117-e][009][feMIMO] feMIMO Open Issues Input (Ericsson) Ericsson report NR\_feMIMO-Core Late

DISCUSSION

P2

- OPPO think this is cell group level, no need to FFS. Huawei agrees. Ericsson think the views in the discussion were divergent. ZTE also agrees with OPPO

P3

- Chair: Discussion offline (in one of the offlines).

P5

- Nokia think this is ASN1 detail. IEs can be moved around. OPPO wonder if this is really relevant to MTC. Ericsson think there could be confusion due to previous duplication of info for Idle and Conn.

P6

- QC and Ericsson has assumed this was actually needed. Nokia agrees, and think if we should not have it, then R1 should remove it. ZTE agrees.

- Intel understands that additionalPCI is not requested by R1. Ericsson think this is ambiguous. Intel think this is not necessary. LG agree w Intel. OPPO agree as well.

- Samsung indicates that MAC CR is already impl acc to previous RRC assumption, will this be a working assumption. Chair think unclarities and inconsistencies in CRs can be indicated in Editors Notes.

P7

- Nokia think this is not clear. Intel think RRC rapporteur proposal can be baseline, intel proposed the CHOICE, can be considered later.

- OPPO think that the ref to BWP can also be for UL TCI state. Intel agrees, we need an ID for UL as well. Ericsson think R1 has no input related to UL, so maybe we should ask this,

- Chair: Seems like we can keep RRC rapporteur proposal as a baseline.

* P1 is agreed (ASN.1 revision, pl see [R2-2203050](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203050.zip))
* Configure UE with two SR IDs, schedulingRequestID-BFR and schedulingRequestID-BFR2, which are associated in an implicit manner in field description to corresponding BFD sets(and align further when BFD set configuration finalizes). FFS whether these IDs are cell group level, cell level or BWP level.
* Add SSB transmission power to SSB-MTC-AdditionalPCI-r17. FFS further modifications based on RAN1 input.
* Configure field SSB-MTC-AdditionalPCI in ServingCellConfig.
* Ask Q to R1 in LS whether for mTRP, additionalPCI is needed for PUCCH-SpatialRelationInfo (or equivalent rephrased question).
* [AT117-e][063][feMIMO] LS out (Ericsson)

Scope: Initial LS out, asking questions to R1 according to initial on-line discussion. Can also discuss other easily agreeable or potentially necessary questions to ask R1, if any.

Intended outcome: Approved LS out.

Deadline: W1 Friday

[R2-2203752](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203752.zip) DRAFT LS on further questions on feMIMO RRC parameters Ericsson LS out Rel-17 NR\_feMIMO-Core To:RAN1

Online W1 Wed

- On sim/common TCI state update Huawei think we should not include assumptions, e.g. the list. Intel think this is based on Rel-16. Huawei would be ok to refer to Rel-16 but R17 is different. CATT think we can say that the two configurations R16 and R17 can be separate to allow different reference. OPPO think we lose the point if we don’t mention the new list. Huawei think the main point to emphasize to R1 is that ref CC/BWP is only for cells not in the CC Rel 16 list. Intel think we can come up with reasonable wording.

- Ericsson think that the term common is not clear, it could mean e.g. the joint DL UL update, we need to revise also w.r.t. that. OPPO think there are easy ways to reword to avoid confusion.

- CATT think we can ask R1 whether addPCIinfo should be under QCLinfo type 1 type 2 or if it can be under DLTCI state or joint TCI state info. Ericsson that for this case it will not be in Rel-15/16 (for mTRP). Intel think CATT question is reasonable, can there be different values for QCLinfo type1 and type 2? Ericsson think it is clear, if under QCLinfo type 1 and 2 then need to be the same. OPPO agrees with Ericsson, and think the current CR is ok. Chair: ok we discuss this in R2.

Continue offline deadline friday

[R2-2203762](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203762.zip) LS on further questions on feMIMO RRC parameters Ericsson LS out Rel-17 NR\_feMIMO-Core To:RAN1

* [063] LS out is Approved, Final version in [R2-2203876](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203876.zip)
* [AT117-e][009][feMIMO] RRC (Ericsson)

Scope: Take into account on-line. Make further progress based on non-resolved parts of [R2-2203050](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203050.zip) if any. Progress P10 and P14 from [R2-2203719](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203719.zip). Take into account new LS from RAN1 when/if it becomes available, to the extent reasonable. Update RRC CR. (this discussion will also continue as a post discussion for the CR). Determine agreeable parts, identify discussion points if any.

Intended outcome: Report, revised RRC CR (CR might not be needed for CB).

Deadline: In time for online CB W2 Wednesday

[R2-2203753](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203753.zip) Report of [AT117-e][009][feMIMO] RRC 1 (Ericsson) Ericsson discussion Rel-17 NR\_feMIMO-Core

MARCH 3

P2

- Ericsson proposed O3. HW are ok. CATT are also supportive, as this is clear. Nokia agrees. LGE agrees.

- OPPO prefer to just add to the existing structured, add list for Scell and SpCell

P3

- Huawei clarifies that this means that CFRA is not supported for SpCell BFR using MAC CE. Nokia agrees. Intel agrees and think it is strange to not support CFRA. Ericsson think that we then go to RLM. Intel think that the legacy operation is that we have BFR for SpCell. QC agrees that we need same CFRA beh.

- Can check this offline, a UP centric discussion .. FFS for next meeting

P5

- OPPO think we need more discussion, and also for channel1. Intel agrees

- Ericsson wonder if we need LS to R1.

- Chair: can consider a LS to R1 as part of the RRC CR email discussion, and if agreeable also approve an LS out.

* Release-15 TCI-StateId is reused for DLorJoint-TCIState-Id-r17 and update RRC CR accordingly.
* Assume that we Define new IE BeamFailureRecoveryServingCellConfig with candidateBeamresourceList and candidateBeamresourceList2 in and use that for SCell and SpCell (DL BWP)
* in CSI-ResourceConfig, csi-SSB-ResourceSet2-r17 should be called csi-SSB-ResourceSetListExt-r17, i.e. it is one more element to the existing list
* Add restrictions in the field description, where the additional PCI is added to the QCL-Info. There maybe two QCL type of a TCI-state and it is seems common understanding that the two additional PCI within the QCL-Info within the TCI-state should be the same.

#### 8.17.3.2 Invited tdocs

### 8.17.4 Other

Issues not covered elsewhere.

- OI RRC: FFS for sfnSchemePdsch in PDSCH-Config to be applicable for BWP-DownlinkCommon (RRC Rap: hopefully R1 can give guidence).

#### 8.17.4.1 RRC and General

Please see the RRC CR (in R2-2202000), annotated L1 parameters list (in R2-2202055), and RRC open issues list (in R2-2202001). Please focus company input on Open Issues and unresolved parts.

[R2-2203719](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203719.zip) AI Summary of 8.17.4.1 RRC and General (Intel) Intel Corporation discussion Rel-17 NR\_feMIMO-Core

DISCUSSION W1 Monday

Initial discussion short due to lack of time

- Intel suggest to discuss issues 1, 2, 3 and see if we need to ask RAN1 something.

- Huawei think new can ask Issues 1 and 2 to RAN1, not sure about 3.

- Nokia think indeed we can ask RAN1 on these.

P1

- Chair wonder if we can simplify and just assume that we configure one or the other but not both.

- Nokia think we need to be able to switch smoothly between using Joint and separate.

. Apple think config change would be ok, can ask R1 on issue 2.

Issue 3

- Oppo and Samsung think we should separate lists of R16 and R17. Nokia agrees. Intel think we could ask about what scenarios are intended to work together

* By configuration “both joint TCI and separate DL/UL TCI state” is not supported.
* On Issue 2 (and 3 if question can be finally agreed) we ask RAN1

DISCUSSION W1 Wed

P2

- Samsung wonder whether we really need to indicate this, shouldn’t we indicate just UL or DL. CATT agrees. Ericsson think this is just matter of wording, we can resolve in the CR.

P8

- CATT think this is just a confirmation

- OPPO think there is lots of details, is the intention to say that in either R17 unified TCi fwk OR R16 mTRP fwk? CATT confirm that yes this is the intention.

- ZTE think we have two r16 variants single pdcch and multi pdcch, is this applicable to both? Can ask R1.

- QC also think this should be asked to RAN1

- Intel think that on a high level it is already clear that either R17 unified TCi fwk OR R16 mTRP fwk are configured, and R17 unified TCi fwk is not configured with r16 multi PDCCH. Don’t see a need to ask R1. LGE agrees.

- LGE are ok w P8

- vivo think this is just a confirmation, and think it is applicable to R16 singel and multiple pdcch and this is clear already, no need to ask R1.

- ZTE don’t understand then why we need to consider sim TCI update for R16 and R17 unified TCI state. Oppo and Intel think we already ask question applicable to this (in the draft LS).

- Ericsson think R1 may confirm this in a reply LS (reply to our previous LS), so maybe we don’t need to confirm.

- Chair: stop, no confirmation for now.

P12

- Ericsson whether there is anything to describe. If so think it should be in Stage-2.

* RAN2 agree that sfnSchemePdsch in PDSCH-Config is only applicable for BWP-DownlinkDedicated.
* RAN2 confirms that there is no impact to RRM with inter-cell mTRP.
* indicate which TCI mode (joint or separate) should currently be used in a serving cell in the ServingCellConfig. The tci-StateType-r17 parameter should be removed from the current RRC running CR.
* SI reception in inter-cell BM should be covered in TS38.300 (Samsung)

Proposals 10 and 14 go to the RRC offline discussion

[R2-2202669](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202669.zip) Remaining issues on RRC parameters Intel Corporation discussion Rel-17 NR\_feMIMO-Core

Moved here

[R2-2202319](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202319.zip) Discussion on RRC aspects for feMIMO vivo discussion Rel-17 NR\_feMIMO-Core

[R2-2202348](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202348.zip) Systerm Information provisioning for inter-cell beam management Fujitsu discussion Rel-17 NR\_feMIMO-Core

[R2-2202447](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202447.zip) Discussion on FeMIMO open issues OPPO discussion Rel-17 NR\_feMIMO-Core

[R2-2202927](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202927.zip) PUCCH power control for mTRP FR1 Samsung discussion Rel-17 NR\_feMIMO-Core

[R2-2203041](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203041.zip) FeMIMO RRC impact Ericsson discussion Rel-17 NR\_feMIMO-Core

[R2-2203043](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203043.zip) Per BWP configuration of SFN scheme Ericsson discussion Rel-17 NR\_feMIMO-Core

Moved here

[R2-2203102](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203102.zip) Discussions on the remaining RRC issues of feMIMO CATT discussion Rel-17 NR\_feMIMO-Core

[R2-2203103](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203103.zip) Considerations on Inter-cell Beam Management CATT discussion Rel-17 NR\_feMIMO-Core R2-2201254

[R2-2203126](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203126.zip) Clarification on the serving cell measurement for mTRP Xiaomi Communications discussion Rel-17 NR\_feMIMO-Core R2-2201386

[R2-2203263](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203263.zip) Signaling support for UL power control for BM LG Electronics France discussion Rel-17

Moved here

[R2-2203381](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203381.zip) FeMIMO RRC issues Huawei, HiSilicon discussion Rel-17 NR\_feMIMO-Core

[R2-2202231](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202231.zip) Discussion on unified TCI framework TCL Communication Ltd. Discussion

Moved Here

* 13 tdocs are Noted

Withdrawn

R2-2202230 Discussion on unified TCI framework TCL Communication Ltd. discussion Withdrawn

#### 8.17.4.2 MAC

Please check the MAC CR (in R2-2201994) for Open issues on MAC. Please focus company input on Open Issues.

[R2-2203709](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203709.zip) [Pre117-e][016][feMIMO] AI summary of 8.17.4.2 MAC Samsung

P4

- Nokia wonder if this actually works, as the BFR is considered successful even if UE doesn’t indicate candidate.

- Samsung think p14 addresses this, this point can be discussed there.

P18

- intel wonder why new MAC CE need this. Samsung think power control sets might not be the same as spatial relation, so this is a safe way, and it shortens discussion. Ericson point out that we have agreed to not use spatial relation but a new RRC config with a new index, and we need a MAC CE that works with the new Index. OPPO agrees with Ericsson. QC agree with Intel think MAC CE format can be the same, can refer to different RRC IE.

P23

- OPPO think there are additional conditions, ZTE think the P23 is general, specific details are discussed in P29. Chair: We Treat P23 and P29 together.

P25

- Huawei think we may need to somewhat modify the legacy condition as it is per cell, and now we need per TRP or similar. Apple agrees. Vivo agree.

* P1: eLCID is used for Enhanced BFR MAC CE with four octets Ci and truncated Enhanced BFR MAC CE with four octets Ci.
* P2: TRP level truncation is supported.
* P3: MAC entity may stop, ongoing Random Access procedure due to a pending SR for BFR of a BFD-RS set of SpCell, which has no valid PUCCH resources configured, if a MAC PDU is transmitted using a UL grant other than a UL grant provided by Random Access Response or a UL grant determined as specified in clause 5.1.2a for the transmission of the MSGA payload, and this PDU contains an Enhanced BFR MAC CE or a Truncated Enhanced BFR MAC CE which includes beam failure recovery information of that BFD-RS set of the SpCell.
* P4: The MAC entity shall consider the BFR(s) triggered for a BFD-RS set of a Serving Cell successfully completed (shall not continue) if a PDCCH addressed to C-RNTI indicating uplink grant for a new transmission is received for the HARQ process used for the transmission of the Enhanced BFR MAC CE or Truncated Enhanced BFR MAC CE which contains beam failure recovery information of that BFD-RS set of the Serving Cell.
* P16: Add a NOTE regarding the reference point of starting a DRX inactivity timer when PDCCH repetition is configured.
* P17: Introduce new MAC CE(s) to support PUCCH Power control set update (with power control) for FR1 cases consisting linking of PUCCH resource with one or two PUCCH-PowerControlSetInfos.
* P18: PUCCH power control for mTRP FR1 MAC CE support multiple number of linking between PUCCH Resource ID and PUCCH power control sets.
* P19: PUCCH resource group concept can be also applied to the PUCCH power control for mTRP FR1 MAC CE.
* P20: UL BWP ID which points to the BWP where UL TCI state list is configured is included in unified TCI state activation/deactivation MAC CE.
* P21: The Enhanced PHR MAC CE with two PHs of the same serving cell is introduced for both the single entry format and multiple entry format.
* P22: Both single octet bitmap (7 Ci bits and 1 R bit) and 4 octet bitmap (31 Ci bits and 1 R bit) formats are supported for the Enhanced PHR MAC CE.
* P24: No new TRP specific PHR related parameters are introduced. The legacy PHR related timers and threshold parameters are reused for the enhanced PHR reporting for the mTRP PUSCH repetition case.
* P25: The legacy PHR triggering conditions are reused for supporting enhanced PHR reporting in the mTRP PUSCH repetition case (but triggering condition assumed per TRP instead of per Cell)
* P26: Rel-17 MPE information reporting related issues would be discussed after receiving reply LS from RAN1. [R2-2203269](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203269.zip) could be the baseline of the further discussion.

Continue offline and CB next week

* [AT117-e][016][feMIMO] MAC (Samsung)

Scope: Take into account on-line. Make further progress based on non-resolved parts of [R2-2203709](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203709.zip). Take into account new LS from RAN1 when/if it becomes available, to the extent reasonable. Update MAC CR. (This discussion will also continue as a post discussion for the CR). Determine agreeable parts, identify discussion points if any.

Intended outcome: Report, revised MAC CR (CR might not be needed for CB).

Deadline: In time for online CB W2 Wednesday

[R2-2204056](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204056.zip) Summary of [AT117-e] [016] [feMIMO] MAC (Samsung) Samsung discussion Rel-17 NR\_feMIMO-Core

MARCH 3

DISCUSSION 1

P1

- Chair: Both options work

- ZTE think option 2 has somewhat less bit consumption, but option 1 is clearer and aligned with logical understanding.

- Samsung think that O1 indeed doesn’t use R bit and is thus more extendable, but on the other hand O2 consumes less bits.

P4

- Nokia wonder if this is then flexible, 1 to 4 octets or 1 or 4 octets. Samsung think it can be 0, 1, 2, 3, 4 octets. ZTE agrees

P6 P7

- Nokia think this is unclear, does it imply a prioritization? Samsung think it si clear that we need to do this. Think it would be included in order: both TRP of SpCell before including other TRP.

- LGE think that P6 is agreeable for SCell and clarification is needed only for SpCell.

* P1 O2: For enhanced BFR MAC CE format:

Include a bitmap in addition to previously agreed serving cell bitmap which indicates per failed Serving Cell configured with mTRP BFD/BFR whether one or both of the TRPs associated with the Serving Cell failed.

Beam failure recovery information of BFD-RS set includes TRP ID (i.e. BFD-RS set ID) as previously agreed.

* The size of the bitmap is based on the number of failed Serving Cells configured with two BFD-RS sets.
* eLCID is used for Enhanced BFR MAC CE with one octet Ci and truncated Enhanced BFR MAC CE with one octet Ci.
* Chair: P6 and P7 seems both agreeable but clarification in the order of truncation the next level of detail seems needed, can attempt to implement in the CR and discuss the details on truncation order in the CR discussion.
* For the RA procedure initiated for beam failure recovery of both TRPs of SpCell, UE uses truncated format with one octet Ci bitmap, if truncated format with 4 octet Ci bitmap format cannot be included.
* Legacy BFR MAC CE and enhanced BFR MAC CE are not triggered at the same time. If at least one serving cell is configured with two BFD-RS sets, enhanced BFR MAC CE is used for BFR of serving cells configured with or without BFD-RS sets
* For the case PUCCH resource for pending SR for SCell beam failure recovery overlaps with PUCCH resource for pending SR for beam failure recovery of BFD-RS set for the SR transmission occasion, it’s up to UE implementation to select PUCCH resource for SCell beam failure recovery or PUCCH resource for beam failure recovery of BFD-RS set.

DISCUSSION 2

P12

- ZTE think we have enough eLCIDs and can have separate MAC CEs. Simpler.

- Nokia wonder if we then have one bit to discriminate joint separate. SS think RRC configures joint or separate. Intel agrees with SS.

P15

- Huawei would like to leave P15 out for now this is a new situation, with maybe some needed clarification.

P13

- SS indicate that there are opposing views.

- ZTE think A is the standalone scenario only. ZTE ok with A if scenario limitation is clarified. LGE agrees. Vivo support A and think it is not only for SA case. Intel think A is baseline, B is mainly for DC, can alternatively have internode coord.

- OPPO think clearly an extension of PHR format is needed.

- Nokia think B is clearer, A is ambiguous.

- SS think B can be a clarification of A, no choince is needed

P14

- OPPO think that one PHR MAC CE may need twoPHRmode, but another one NOT.

* No further clarification is needed on the Active Time for the PDCCH repetition case.
* For unified TCI state activation/deactivation MAC CE, different MAC CE format/interpretation of contents for Joint TCI state and separate TCI state may be assumed. This is modeled as a single MAC CE, where choice is based on RRC configuration.
* FFS if Upon reception of a MAC CE to activate an SP SRS resource set for antenna switching, autonomous deactivation of any previously activated SP SRS resource set for antenna switching is not allowed (as in legacy).
* FFS: A - if UE is configured with twoPHRMode for a CG and mTRP PUSCH repetition is configured for the serving cell PHR MAC CE with mTRP is used, and two PHs for a serving cell of the CG is reported

DISCUSSION 3

P19

- ZTE wonder if this is legacy PHR or new PHR. SS think indeed that the new R17 MAC CE will not be applicable to mTRP case.

P22

- OPPO think we need more time for this. This is not mature.

- Nokia think this is a good baseline.

* RAN2 confirm that “Enhanced TCI state indication for UE specific PDCCH MAC CE” can be applied to CORESET zero.
* PUCCH power control for mTRP FR1 MAC CE includes up to two 3bit-length PUCCH power control set IDs, and one-bit indicator to differentiate whether the PUCCH resource is associated with one or two power control set.
* RAN2 confirm that Rel-17 enhanced MPE reporting can apply to ICBM framework, but the enhanced MPE reporting is not applied to mTRP operation.
* Create PHR MAC CE (new MAC CE with eLCID) with MPE information, which contains at least MPE-field (including P-bit as in legacy) and 6bit-length SSBRI/CRI-field for the MPE information.
* Include up to N P-MPR values, each value paired with 1 SSBRI/CRI resource ID, where N is configured by RRC signaling (numberofN).
* up to 4 P-MPR value reporting is included for serving cell(s) enabled for P-MPR reporting.
* Below MAC CE formats are the baseline for PHR MAC CE with enhanced MPE (New MAC CE with new eLCID value).

A) Single-entry PHR contains:

- Per cell, one octet for beam presence (4 bits) and P-bits (4 bits)

- Per cell, one octet for MPE information (for all beams, with 2 bits / beam)

- Per beam (if present), one octet per SSBRI/CRI of the beam

NOTE: this octet could be 2 reserved bits and 6 bits for SSBRI/CRI of the beam.

B) Multi-entry PHR (with 8 cells):

- Per PHR, one octet for bitmap indicating which serving cells have beam information present (8 bits)

- Per cell, one octet for beam presence (4 bits) and P-bits (4 bits)

- Per cell, one octet for MPE information (for all beams, with 2 bits / beam)

- Per beam (if present), one octet per SSBRI/CRI of the beam

C) Multi-entry PHR (with 32 cells):

- Per PHR, four octets for bitmap indicating which serving cells have beam information present (32 bits)

- Per cell, one octet for beam presence (4 bits) and P-bits (4 bits)

- Per cell, one octet for MPE information (for all beams, with 2 bits / beam)

- Per beam (if present), one octet per SSBRI/CRI of the beam

* FFS details for PHR MAC CE with enhanced MPE, whether bits for beam presence are needed

[R2-2202288](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202288.zip) Multi TRP Beam Failure Detection and Recovery Samsung Electronics Co., Ltd discussion Rel-17 NR\_feMIMO-Core

[R2-2202320](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202320.zip) Discussion on remaining issues on MAC aspects for feMIMO vivo discussion Rel-17 NR\_feMIMO-Core

[R2-2202349](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202349.zip) Remaining issues on beam failure with mTRP Fujitsu discussion Rel-17 NR\_feMIMO-Core

[R2-2202448](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202448.zip) MAC CE design for FeMIMO OPPO discussion Rel-17 NR\_feMIMO-Core

[R2-2202557](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202557.zip) MAC impacts of FeMIMO Apple discussion Rel-17 NR\_feMIMO-Core

[R2-2202572](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202572.zip) BFR for both SpCell and SCell in mTRP Lenovo, Motorola Mobility discussion Rel-17

[R2-2202670](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202670.zip) Remaining issues on MAC CEs Intel Corporation discussion Rel-17 NR\_feMIMO-Core

[R2-2202772](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202772.zip) MAC CE Design for Unified TCI States Activation Deactivation MediaTek Inc. discussion

[R2-2202851](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202851.zip) Discussion on Power Headroom Reporting for mTRP PUSCH repetition ASUSTeK discussion Rel-17 NR\_feMIMO-Core

[R2-2202852](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202852.zip) Discussion on MAC CE design regarding separate and joint TCI state ASUSTeK discussion Rel-17 NR\_feMIMO-Core

[R2-2202928](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202928.zip) Discussions on PHR enhancements for mTRP PUSCH repetition Samsung discussion Rel-17 NR\_feMIMO-Core

[R2-2202957](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202957.zip) Remaining issues on multi-TRP BFR Qualcomm Incorporated discussion Rel-17 NR\_feMIMO-Core

[R2-2202958](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202958.zip) Remaining issues on MAC and MIMO MAC CEs Qualcomm Incorporated discussion Rel-17 NR\_feMIMO-Core

[R2-2203044](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203044.zip) MAC CE impacts Ericsson discussion NR\_feMIMO-Core

[R2-2203093](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203093.zip) Remaining issues on MAC LG Electronics Inc. discussion NR\_feMIMO-Core

[R2-2203104](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203104.zip) Discussions on the remaining open Issues of 38.321 Running CR CATT discussion Rel-17 NR\_feMIMO-Core

[R2-2203246](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203246.zip) Consideration on Implementation of BFR for mTRP ZTE Corporation,Sanechips discussion Rel-17 NR\_feMIMO-Core

[R2-2203247](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203247.zip) Further Considerations On New PHR and PHR MAC CE ZTE Corporation,Sanechips discussion Rel-17 NR\_feMIMO-Core

[R2-2203248](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203248.zip) Consideration on the unified TCI State MAC CE for ICBM ZTE Corporation,Sanechips discussion Rel-17 NR\_feMIMO-Core

[R2-2203269](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203269.zip) PHR reporting for FeMIMO Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_feMIMO-Core

[R2-2203282](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203282.zip) Beam failure with mTRP Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_feMIMO-Core

[R2-2203382](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203382.zip) FeMIMO MAC open issues Huawei, HiSilicon discussion Rel-17 NR\_feMIMO-Core

[R2-2203383](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203383.zip) SP-SRS resource set activation by MAC CE Huawei, HiSilicon discussion Rel-17 NR\_feMIMO-Core

[R2-2203426](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203426.zip) Discussion on Multi-TRP PHR enhancements InterDigital discussion Rel-17 NR\_feMIMO-Core R2-2201168

* [016] 24 tdocs are Noted

# 8.18 RACH indication and partitioning

Time budget: Equivalent to 0.5-1 TU

Tdoc Limitation: 2 tdocs

Expected to cover WIs SDT, CovEnh, RedCap, RAN slicing. RA specific aspects from the different WI should be covered in this AI given the RA experts are all there.

### 8.18.1 Common signalling framework

Including output of [POST116bis-e][513][IIoT] CP open issues (Ericsson) – NO contributions on these issues

Any other contributions should focus on important issues not covered by open issues email discussions.

[R2-2202558](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202558.zip) Signaling aspects of RACH partitioning Apple discussion Rel-17 NR\_SmallData\_INACTIVE-Core, NR\_cov\_enh-Core, NR\_redcap-Core, NR\_slice-Core

R2-2202693 Remaining issues for signaling design for RACH partitioning CATT discussion Rel-17 NR\_cov\_enh-Core, NR\_slice-Core, NR\_SmallData\_INACTIVE-Core, NR\_redcap-Core Withdrawn

[R2-2203063](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203063.zip) Discussion on RO sharing cases for common RACH configuration LG Electronics Inc. discussion Rel-17 NR\_SmallData\_INACTIVE-Core, NR\_slice-Core, NR\_redcap-Core, NR\_cov\_enh-Core

[R2-2203339](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203339.zip) Common signalling for RACH indication and partitioning Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core, NR\_slice-Core, NR\_redcap-Core, NR\_cov\_enh-Core Late

[R2-2203356](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203356.zip) RSRP Thresholds for RACH Partitioning Ericsson discussion Rel-17 NR\_redcap-Core, NR\_slice-Core, NR\_cov\_enh-Core Late

[R2-2203357](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203357.zip) Report of [POST116bis-e][515][RA Part] CP open issues Ericsson report Rel-17 NR\_redcap-Core, NR\_slice-Core, NR\_cov\_enh2-Core, NR\_SmallData\_INACTIVE-Core Late

[R2-2203358](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203358.zip) Introduction of common RACH partitioning aspects in RRC Ericsson (rapporteur) CR Rel-17 38.331 16.7.0 2951 - B NR\_SmallData\_INACTIVE-Core, NR\_cov\_enh-Core, NR\_redcap-Core, NR\_slice-Core Late

[R2-2203393](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203393.zip) Further Discussion on RACH Partitioning in RA Configuration Aspect vivo discussion Rel-17 NR\_SmallData\_INACTIVE-Core, NR\_cov\_enh, NR\_redcap-Core, NR\_slice-Core R2-2201597

[R2-2203405](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203405.zip) Slice-specific RACH prioritization in Common RACH Framework Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_slice-Core

### 8.18.2 Common aspects of RACH procedure

Including output of [POST116bis-e][514][RA Part] UP open issues (ZTE) – NO contributions on these issues

Any other contributions should focus on important issues not covered by open issues email discussions.

[R2-2202694](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202694.zip) Remaining issues for common aspects of RACH procedure CATT discussion Rel-17 NR\_cov\_enh-Core, NR\_slice-Core, NR\_SmallData\_INACTIVE-Core, NR\_redcap-Core

[R2-2202976](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202976.zip) Discussion on RACH partition UP open issues OPPO discussion Rel-17 NR\_SmallData\_INACTIVE-Core, NR\_cov\_enh-Core, NR\_redcap-Core, NR\_slice-Core

[R2-2203206](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203206.zip) RNTI collision issue for different features in NR Sony discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2200917

[R2-2203283](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203283.zip) Common aspects for RACH partitioning Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2203307](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203307.zip) Introduction of common RACH partitioning aspects in MAC ZTE Corporation (rapporteur) CR Rel-17 38.321 16.7.0 1214 - B NR\_SmallData\_INACTIVE-Core, NR\_cov\_enh-Core, NR\_redcap-Core, NR\_slice-Core Late

[R2-2203309](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203309.zip) [POST116bis-e][514][RA Part] - Open issue list summary ZTE Corporation (rapporteur) report Rel-17 Late

[R2-2203340](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203340.zip) Further details of RACH procedure with RACH partitioning Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core, NR\_slice-Core, NR\_redcap-Core, NR\_cov\_enh-Core Late

[R2-2203459](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203459.zip) Remaining issues for RACH partitioning InterDigital discussion Rel-17 NR\_SmallData\_INACTIVE-Core, NR\_cov\_enh-Core, NR\_redcap-Core, NR\_slice-Core

## 8.19 Coverage Enhancements

(NR\_cov\_enh-Core; leading WG: RAN1; REL-17; WID: RP-211566)

Time budget: 0.5

Tdoc Limitation: 1 tdoc

Common aspects related to RACH indication (in MSG1) / RACH partitioning shall be submitted to 8.18

### 8.19.1 Organizational

Rapporteur input, incoming LS etc.

[R2-2202153](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202153.zip) Reply LS on Maximum duration for DMRS bundling (R4-2202368; contact: Qualcomm) RAN4 LS in Rel-17 To:RAN1, RAN2

#### 8.19.1.1 LS in

For LSes that need action: one tdoc by contact company to address the LS and potential reply is considered.

Rapporteur input may be provided.

#### 8.19.1.2 CRs

CR Rapporteurs to provide running CRs, potentially updated.

[R2-2202652](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202652.zip) TS 38.321 CR for Rel-17 Coverage enhancement ZTE Corporation, Sanechips CR Rel-17 38.321 16.7.0 1199 - B NR\_cov\_enh-Core

[R2-2202831](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202831.zip) TS 38.300 CR for Rel-17 NR coverage enhancements China Telecom CR Rel-17 38.300 16.8.0 0412 - B NR\_cov\_enh-Core

[R2-2203127](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203127.zip) Introduction of NR coverage enhancements in RRC Huawei, HiSilicon CR Rel-17 38.331 16.7.0 2928 - B NR\_cov\_enh-Core

### 8.19.2 General

All aspects, including possible corrections/TPs for the running CRs.

[R2-2202695](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202695.zip) Remaining issues for Msg3 repetition CATT discussion Rel-17 NR\_cov\_enh-Core

[R2-2202981](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202981.zip) Discussion on CFRA PUSCH with Repetition vivo discussion Rel-17 NR\_cov\_enh

[R2-2203007](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203007.zip) Minor connection to the stage-2 running CR OPPO discussion Rel-17 NR\_cov\_enh-Core

[R2-2203031](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203031.zip) Discussion on Msg3 repetition for CFRA Qualcomm Incorporated discussion Rel-17 NR\_cov\_enh-Core Late

[R2-2203128](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203128.zip) On measurement gap handling for Msg3 repetitions Huawei, HiSilicon discussion Rel-17 NR\_cov\_enh-Core

[R2-2203168](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203168.zip) Further issues on msg3 repetitions Ericsson discussion Rel-17 NR\_cov\_enh

[R2-2203284](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203284.zip) BWP with only CR-RACH resources Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_cov\_enh-Core

## 8.20 Extending NR operation to 71GHz

(NR\_ext\_to\_71GHz-Core; leading WG: RAN1; REL-17; WID: RP-212637)

Time budget: 0.5

Tdoc Limitation: 2 tdocs

Contributions should illustrate the Stage-3 details of the proposals (e.g. in an Annex containing TP against the running CRs). If a contribution does not provide TP, it may be deprioritized.

Contributions should focus on remaining open issues needed to close the WI from RAN2 perspective (e.g. as discussed in [204])

### 8.20.1 Organizational

Including LSs, any rapporteur inputs and results of the (informative) running CR email discussions [218] and [219]

Including input running Stage-2 CR from the specification/WI rapporteur (which does not count against the Tdoc limits)

Including result of open issue email discussion [204].

[R2-2202435](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202435.zip) Running RRC CR for 71 GHz Ericsson CR Rel-17 38.331 16.7.0 2891 - B NR\_ext\_to\_71GHz-Core

[R2-2202479](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202479.zip) [Post116bis-e][204][71 GHz] Open issues for 71 GHz (Qualcomm) Qualcomm Incorporated discussion Rel-17 NR\_ext\_to\_71GHz-Core

[R2-2202659](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202659.zip) CR to 38306 on UE capabilities for 71G Intel Corporation draftCR Rel-17 38.306 16.7.0 B NR\_ext\_to\_71GHz-Core

[R2-2202660](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202660.zip) CR to 38331 on UE capabilities for 71G Intel Corporation draftCR Rel-17 38.331 16.7.0 B NR\_ext\_to\_71GHz-Core

[R2-2202688](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202688.zip) Introduction of Extending NR operation to 71GHz Qualcomm Incorporated CR Rel-17 38.300 16.8.0 0408 - B NR\_ext\_to\_71GHz-Core

### 8.20.2 General

Including discussion if additional differentiation between licensed operation and "no-LBT mode" is needed for any case

Including discussion on whether RAN2 should introduce new absolute values for CG/SR/DRX parameters

[R2-2202433](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202433.zip) Remaining protocol aspects Ericsson discussion Rel-17 NR\_ext\_to\_71GHz-Core

[R2-2202434](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202434.zip) Remaining RRC aspects Ericsson discussion Rel-17 NR\_ext\_to\_71GHz-Core

[R2-2202710](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202710.zip) Discussion about RAN2 impacts of Ext 52-71GHz Huawei, HiSilicon discussion Rel-17 NR\_ext\_to\_71GHz-Core

[R2-2202920](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202920.zip) Remaining issues on UAI enhancement Samsung discussion Rel-17 NR\_ext\_to\_71GHz-Core

[R2-2203079](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203079.zip) Discussion on necessary update of Rel-16 LBT procedures CATT discussion Rel-17 NR\_ext\_to\_71GHz-Core

[R2-2203418](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203418.zip) CP open issues for RRC CR Extending NR operation to 71GHz ZTE Corporation, Sanechips discussion

[R2-2203419](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203419.zip) Remaining UP issues for extending to 71GHz ZTE Corporation, Sanechips discussion

### 8.20.3 UE capabilities

This agenda item may use a summary document.

Including discussion on interaction of FR2-2 UE capabilities with upper layer features introduced by other Rel-17 WIs

Including discussion on UE capabilities for FR2-2 based on decision to go with per-band signalling

[Pre117-e][210][71 GHz] Summary of UE capabilities for 71 GHz (Intel)

Scope: summarize contributions to 71 GHz UE capabilities and provide proposals for discussion.

Intended outcome: Summary document in R2-220xxxx.

Deadline: TBD

[R2-2202661](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202661.zip) Remaining UE capability issues on NR operation for upto 71GHz Intel Corporation discussion Rel-17 NR\_ext\_to\_71GHz-Core

[R2-2202711](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202711.zip) Discussion about UE capabilities on Ext 52-71GHz Huawei, HiSilicon discussion Rel-17 NR\_ext\_to\_71GHz-Core

[R2-2202921](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202921.zip) Discussion on L2 buffer size Samsung discussion Rel-17 NR\_ext\_to\_71GHz-Core

## 8.21 TEI17

Time budget: 1.5 TU

Note that TEI17 will have low priority in 2022 Q1. Normal treatment resumed in Q2.

### 8.21.0 In-principle agreed CRs

CRs that were previsouly in-principle agreed + complementary proposals or corrections if any.

Offline

* [AT117-e][049][NR17TEI] In-principle Agreed CRs and related docs (ZTE)

Scope: Treat [R2-2202225](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202225.zip), [R2-2202395](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202395.zip), [R2-2202396](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202396.zip), Has comments: [R2-2202397](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202397.zip), [R2-2202398](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202398.zip), [R2-2202399](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202399.zip), [R2-2202400](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202400.zip), [R2-2202626](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202626.zip), [R2-2202627](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202627.zip), [R2-2202628](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202628.zip), [R2-2202629](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202629.zip), R2-22083306, Non-IPA: [R2-2202608](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202608.zip). Check IPA CRs, and determine revisions if needed. Take into account the comments provided in [R2-2202225](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202225.zip). Determine whether the not yet agreed CR in [R2-2202608](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202608.zip) or some variant is agreeable.

Intended outcome: Report, Agreed CRs, Endorsed NR UE cap CRs (for merge)

Deadline: Schedule 1

[R2-2203839](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203839.zip) Report of [AT117-e][049][NR17TEI] In-principle Agreed CRs and related docs ZTE corporation,Sanechips discussion Rel-17 TEI17

=> Revised in [R2-2203907](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203907.zip)

[R2-2203907](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203907.zip) Report of [AT117-e][049][NR17TEI] In-principle Agreed CRs and related docs ZTE corporation,Sanechips discussion Rel-17 TEI17

* [049] Noted, agreements reflected below

PO determination RRC INACTIVE

[R2-2202225](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202225.zip) Discussion on UE capability signaling of inactiveStatePO-Determination-r17 in LTE Lenovo, Motorola Mobility discussion Rel-17 TEI17 R2-2201140

[R2-2202395](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202395.zip) Correction on PO determination in inactive state ZTE corporation, Ericsson, vivo, CMCC, China Telecom, China Unicom, Samsung, Nokia, Nokia Shanghai Bell, Sanechips CR Rel-17 36.304 16.6.0 0840 - F TEI17

=> Revised in R2-2204048

R2-2204048 Correction on PO determination in inactive state ZTE corporation, Ericsson, vivo, CMCC, China Telecom, China Unicom, Samsung, Nokia, Nokia Shanghai Bell, Sanechips CR Rel-17 36.304 16.6.0 0840 1 F TEI17

[R2-2202396](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202396.zip) Correction on PO determination in inactive state ZTE corporation, Ericsson, vivo, CMCC, China Telecom, China Unicom, Samsung, Nokia, Nokia Shanghai Bell, Sanechips CR Rel-17 36.306 16.7.0 1839 - F TEI17

=> Revised in R2-2203908

R2-2203908 Correction on PO determination in inactive state ZTE corporation, Ericsson, vivo, CMCC, China Telecom, China Unicom, Samsung, Nokia, Nokia Shanghai Bell, Sanechips CR Rel-17 36.306 16.7.0 1839 1 F TEI17

[R2-2202397](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202397.zip) Correction on PO determination in inactive state ZTE corporation, Ericsson, vivo, CMCC, China Telecom, China Unicom, Samsung, Nokia, Nokia Shanghai Bell, Sanechips CR Rel-17 36.331 16.7.0 4759 - F TEI17

=> Revised in R2-2204049

R2-2204049 Correction on PO determination in inactive state ZTE corporation, Ericsson, vivo, CMCC, China Telecom, China Unicom, Samsung, Nokia, Nokia Shanghai Bell, Sanechips CR Rel-17 36.331 16.7.0 4759 1 F TEI17

[R2-2202398](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202398.zip) Correction on PO determination in inactive state ZTE corporation, Ericsson, vivo, CMCC, China Telecom, China Unicom, Samsung, Nokia, Nokia Shanghai Bell, Sanechips CR Rel-17 38.304 16.7.0 0228 - F TEI17

=> Revised in R2-2204050

R2-2204050 Correction on PO determination in inactive state ZTE corporation, Ericsson, vivo, CMCC, China Telecom, China Unicom, Samsung, Nokia, Nokia Shanghai Bell, Sanechips CR Rel-17 38.304 16.7.0 0228 1 F TEI17

[R2-2202399](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202399.zip) Correction on PO determination in inactive state ZTE corporation, Ericsson, vivo, CMCC, China Telecom, China Unicom, Samsung, Nokia, Nokia Shanghai Bell, Sanechips CR Rel-17 38.306 16.7.0 0679 - F TEI17

=> Revised in R2-2204051

R2-2204051 Correction on PO determination in inactive state ZTE corporation, Ericsson, vivo, CMCC, China Telecom, China Unicom, Samsung, Nokia, Nokia Shanghai Bell, Sanechips CR Rel-17 38.306 16.7.0 0679 1 F TEI17

[R2-2202400](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202400.zip) Correction on PO determination in inactive state ZTE corporation, Ericsson, vivo, CMCC, China Telecom, China Unicom, Samsung, Nokia, Nokia Shanghai Bell, Sanechips CR Rel-17 38.331 16.7.0 2889 - F TEI17

Chair Comment: Shouldn’t the The WI code for these CRs be: NR\_newRAT-Core, TEI17

=> Revised in R2-2204052

R2-2204052 Correction on PO determination in inactive state ZTE corporation, Ericsson, vivo, CMCC, China Telecom, China Unicom, Samsung, Nokia, Nokia Shanghai Bell, Sanechips CR Rel-17 38.331 16.7.0 2889 1 F TEI17

NR HSDN

[R2-2202626](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202626.zip) Introduction of mobility-state-based cell reselection for NR HSDN [NR\_HSDN] CMCC, CATT, Ericsson, Huawei, ZTE, Nokia, OPPO, vivo CR Rel-17 38.331 16.7.0 2846 1 B TEI17 R2-2110772

[R2-2202627](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202627.zip) Introduction of mobility-state-based cell reselection for NR HSDN CMCC, CATT, Ericsson, Huawei, ZTE, Nokia, OPPO, vivo CR Rel-17 38.304 16.7.0 0223 1 B TEI17 R2-2110232

[R2-2202628](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202628.zip) Introduction of mobility-state-based cell reselection for NR HSDN CMCC, CATT, Ericsson, Huawei, ZTE, Nokia, OPPO, vivo CR Rel-17 38.306 16.7.0 0650 1 B TEI17 R2-2110234

=> Revised in [R2-2203851](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203851.zip)

[R2-2203851](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203851.zip) Introduction of mobility-state-based cell reselection for NR HSDN CMCC, CATT, Ericsson, Huawei, ZTE, Nokia, OPPO, vivo CR Rel-17 38.306 16.7.0 0650 2 B TEI17

[R2-2202629](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202629.zip) Introduction of mobility-state-based cell reselection for NR HSDN CMCC, CATT, Ericsson, Huawei, ZTE, Nokia, OPPO, vivo CR Rel-17 36.331 16.7.0 4730 1 B TEI17 R2-2110235

NR TADV

Chair Comment: The 38305 CR was agreed in-principle. The 38300 CR is new, but they should both be treated together.

[R2-2203366](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203366.zip) Addition of Timing Advance measurement reporting in NR E-CID [NRTADV] Ericsson, NTT Docomo, Polaris Wireless, Verizon, China Telecom, FirstNet, Deutsche Telekom, Intel Corporation, CATT, Nokia, Nokia Shanghai Bell, Huawei CR Rel-17 38.305 16.7.0 0082 1 B TEI17 R2-2110711

=> Revised in [R2-2203919](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203919.zip)

[R2-2203919](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203919.zip) Addition of Timing Advance measurement reporting in NR E-CID [NRTADV] Ericsson, NTT Docomo, Polaris Wireless, Verizon, China Telecom, FirstNet, Deutsche Telekom, Intel Corporation, CATT, Nokia, Nokia Shanghai Bell, Huawei CR Rel-17 38.305 16.7.0 0082 2 B TEI17

[R2-2202608](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202608.zip) Introduction of RACH triggers for T\_ADV in NR E-CID [NRTADV] Huawei, HiSilicon, Ericsson, CATT, NTT DOCOMO, Deutsche Telekom, Polaris Wireless, ZTE Corporation CR Rel-17 38.300 16.8.0 0407 - B TEI17

=> Revised in [R2-2203935](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203935.zip)

[R2-2203935](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203935.zip) Introduction of RACH triggers for T\_ADV in NR E-CID [NRTADV] Huawei, HiSilicon, Ericsson, CATT, NTT DOCOMO, Deutsche Telekom, Polaris Wireless, ZTE Corporation CR Rel-17 38.300 16.8.0 0407 1 B TEI17

### 8.21.1 TEI proposals initiated by other groups

Including incoming LSes. This AI may be deprioritized at current meeting.

[R2-2202126](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202126.zip) Reply on security protection of RRCResumeRequest message (R3-221183; contact: ZTE) RAN3 LS in Rel-17 To:SA3,RAN2

Chair: This is the RAN3 reply to SA3. RAN2 already sent a reply as well. Assume there is no action and it can simply be Noted.

[000] proposed Noted

### 8.21.2 TEI proposals initiated by RAN2

Treatment of new (= not agreed) proposals will have low priority at current meeting.

Tdoc limitation: 2 tdocs, except for Operators.

CRs or detailed modifications to agreed proposals are not counted towards the limit.

Proposals related to DRX HARQ RTT timer for one-shot HARQ feedback for NR-U will be treated in a breakout sessions together with NR17 IIOT taking into account R2 116-e agreement for R2-2110948, under AI 8.5.3

SI scheduling

Treat offline

* [AT117-e][050][NR17TEI] Explicit Indication of SI Scheduling start position (Ericsson)

Scope: Treat [R2-2203365](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203365.zip)

Intended outcome: Agreed CR.

Deadline: W1 Friday (if possible)

CLOSED

[R2-2203365](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203365.zip) Explicit Indication of SI Scheduling start position [SI-SCHEDULING] Ericsson, Verizon, Softbank, Deutsche Telekom, vivo CR Rel-17 38.331 16.7.0 2953 - B TEI17

=> Revised in [R2-2203916](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203916.zip)

[R2-2203916](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203916.zip) Explicit Indication of SI Scheduling start position [SI-SCHEDULING] Ericsson, Verizon, Softbank, Deutsche Telekom, vivo CR Rel-17 38.331 16.7.0 2953 1 B TEI17

[R2-2203993](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203993.zip) Explicit Indication of SI Scheduling start position [SI-SCHEDULING] Ericsson, Verizon, Softbank, Deutsche Telekom, vivo CR Rel-17 38.331 16.7.0 2953 2 B TEI17

- vivo think winpos should be optional, as this will save bits. Apple agrees.

- Huawei ok with the CR.

* The CR is agreed with the following FFS: whether the si-WindowPosition-r17 is optional or not can be discussed as part of ASN.1 review

[R2-2203917](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203917.zip) Capability for Explicit Indication of SI Scheduling window position [SI-SCHEDULING] Ericsson CR Rel-17 38.306 16.7.0 0698 - B TEI17

[R2-2204001](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204001.zip) Capability for Explicit Indication of SI Scheduling window position [SI-SCHEDULING] Ericsson CR Rel-17 38.306 16.7.0 0698 1 B TEI17

* Agreed

[R2-2203918](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203918.zip) [AT117-e][050][NR17TEI] Explicit Indication of SI Scheduling start position (Ericsson) Ericsson discussion Rel-17 TEI17

* [050] Noted

Secondary DRX - on the table

Treat on-line (if time)

[R2-2202265](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202265.zip) Secondary DRX enhancement Ericsson, Verizon, Qualcomm Inc., T-Mobile USA Inc., Deutsche Telekom discussion Rel-17 TEI17 R2-2201559

DISCUSSION

- OPPO think the motivation is weak, FR2 carrier is for Data boosting which is not real time service, so this is not needed. ZTE agrees, and think if there are delay sensitive situation then no DRX is needed. LGE agrees

- Ericsson think that delay also impacts TCP, and the point of secondary DRX is to allow FR2 carrier to sleep.

- SOH shows that the active Yes / No companies are fairly balanced.

* Not agreed

EPS Fallback - on the table

Treat on-line (if time)

[R2-2202818](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202818.zip) EPS fallback enhancements in Rel-17 Huawei, HiSilicon, CMCC, China Telecom, China Unicom, LG Uplus discussion Rel-17 TEI17

[R2-2202505](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202505.zip) Discussion on EPS fallback enhancement Apple, ZTE discussion Rel-17 TEI17

[R2-2202791](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202791.zip) Redirection enhancement on EPS Fallback vivo discussion Rel-17 TEI17 R2-2201401

* 3 tdocs noted

DISCUSSION Whether to have a EPS fallback enhancement where the UE goes directly to EUTRA for conn establishment upon paging in NR (FFS if indicated in paging message or in SIB).

- QC think these enh. have impact in other groups, think that if we do something in AS only, this is not really EPS fallback. Need also to define behaviour for IMS for MO call. For MT how can the call be re-routed without impact. CATT agrees that MT call would need impact in other group.

- Lenovo wonder if we can assume that paging in inactive is trusted or not (was an earlier decision to not allow redirection on paging for Inactive).

- China Unicom support this, prefer paging solution as network then can have per UE control.

- Nokia think that EPS fallback is important, and both MT and MO is important, but has some sympathy for QC and Lenovo comments.

- Huawei think that the CN aspects can be handled wo impact, and think for Multi-SIM SA3 has already assessed impact of redirection on paging, and there were no issues.

- Huawei indeed assumes N26 interface (MME AMF).

- VDF think there are issues, although it would be good to improve EPS fallback. If go ahead at least SA3 would need to be consulted on the security aspects of redirection on paging.

- Ericsson also share concerns, and also that this may be a blind handover, which takes time.

- CMCC think this is good to limit the delays and support this.

- Chair Comment: There seems to be strong support to enhance for EPS fallback. Assume that it could go forward if feasible.

- Chair think that sending an LS to SA3 to ask a security question could still be doable within the scope of TEI, but if there is impact to Core Network then this Enhancement would require a separate WID.

Offline, on impact to other groups.

* [AT117-e][074][TEI17] EPS Fallback (Huawei)

Scope: Related to [R2-2202818](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202818.zip), [R2-2202505](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202505.zip), [R2-2202791](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202791.zip). Whether to have a EPS fallback enhancement where the UE goes directly to EUTRA for conn establishment upon paging in NR (MT), or NAS indication in the UE (MO). Determine and clarify the potential impact to other groups and security implications for MT and MO cases, aiming to understand whether the scope for this proposal can be kept limited to RAN2. If possible, determine if LS is needed to SA3.

Intended outcome: Report, agreeable LS to SA3 if applicable.

Deadline: For on-line CB W2 Thursday

CLOSED

[R2-2203990](file:///C:\Users\johan\OneDrive\Dokument\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203990.zip) Report of [AT117-e][074][TEI17] EPS Fallback (Huawei) Huawei discussion Rel-17 TEI17

- Huawei proposes to send LS

- Nokia wonder if also the SIB based solution was considered, could have other impact

- QC don’t agree with the document, think that leave to UE impl is not the right way to do this.

- QC think that UE connecting to different network by UE impl for MO case is not realistic, NAS specifies this.

- Apple think indeed UE can do some things by UE impl.

- QC think that simply bcasting LTE frequencies wo UE behaviour can be acceptable.

* Can send LS to SA2 SA3 CT1, if the LS can be sufficiently concrete.

Post email discussion.

* [Post117-e][074][TEI17] EPS Fallback (Huawei)

Scope: Related to [AT117-e][074][TEI17], on Whether to have a EPS fallback enhancement where the UE goes directly to EUTRA for conn establishment upon paging in NR (MT), or NAS indication in the UE (MO). In order to determine whether the scope for these proposal(s) can be kept limited to RAN2 and the solution acceptable, send an LS to SA2 SA3 CT1. The LS should be sufficiently concrete to not generate a lot of work in the receiving groups.

Intended outcome: Approved LS out

Deadline: Short Post

[R2-2202792](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202792.zip) 38331 CR for Redirection enhancement on EPS Fallback vivo CR Rel-17 38.331 16.7.0 2873 1 B TEI17 R2-2201402

[R2-2202793](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202793.zip) 38306 CR for Redirection enhancement on EPS Fallback vivo CR Rel-17 38.306 16.7.0 0671 1 B TEI17 R2-2201403

SRS in dormancy - on the table

Treat on-line (if time)

[R2-2202704](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202704.zip) Periodic SRS in SCell dormant BWP Qualcomm Incorporated, ZTE Corporation, Futurewei discussion Rel-17

SDAP marker (New)

[R2-2202521](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202521.zip) SDAP end-marker in RLC UM Apple, Futurewei, Spreadtrum, FGI, Asia Pacific Telecom, T-Mobile USA discussion Rel-17 TEI17 R2-2201676

TDRA extension (New)

[R2-2203250](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203250.zip) Extension of the timeDomainAllocation for CG type 1 with typeB repetition ZTE Corporation,Huawei, China Telecom, Sanechips CR Rel-17 38.331 16.7.0 2934 - F TEI17

[R2-2203251](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203251.zip) Addition of UE capability of extension of TDRA indication for Configured UL Grant type 1 ZTE Corporation,Huawei, China Telecom, Sanechips CR Rel-17 38.306 16.7.0 0693 - F TEI17

CHO Bye message (New)

[R2-2202992](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202992.zip) Leaving indication for CHO execution Qualcomm Incorporated discussion

Remote Access (New)

[R2-2202632](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202632.zip) Discussion on remote access issue CMCC discussion Rel-17 TEI17

Measurement (New)

[R2-2202436](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202436.zip) On inter-frequency measurement configuration and reporting enhancements BT Plc., Ericsson, Vodafone, T-Mobile USA, Qualcomm discussion Rel-17

Early Measurement for EPS fallback (rejected)

[R2-2202788](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202788.zip) Early measurement for EPS Fallback vivo,CMCC, softbank, China Telecom,China Unicom discussion Rel-17 TEI17 R2-2201398

[R2-2202789](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202789.zip) 38331 CR for Early measurement for EPS Fallback vivo,CMCC, softbank, China Telecom,China Unicom CR Rel-17 38.331 16.7.0 2872 1 B TEI17 R2-2201399

[R2-2202790](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202790.zip) 38306 CR for Early measurement for EPS Fallback vivo,CMCC, softbank, China Telecom,China Unicom CR Rel-17 38.306 16.7.0 0670 1 B TEI17 R2-2201400

## 8.22 NR and MR-DC measurement gap enhancements

(NR\_MG\_enh-Core; leading WG: RAN4; REL-17; WID: RP-211591)

Time budget: 0.5

Tdoc Limitation: 3 tdocs

### 8.22.1 General

#### 8.22.1.1 Organizational

Tdoc Limitation: 0

Planning etc

#### 8.22.1.2 LS in

Tdoc Limitation: 0

LS in. For LSes that need action or has impact beyond taking into account by CR rapporteurs: One tdoc by contact company (one company) to address the LS and potential reply is considered Rapporteur Input and may be provided.

[R2-2202158](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202158.zip) Further reply LS on R17 NR MG enhancements – Concurrent MG (R4-2202604; contact: MediaTek) RAN4 LS in Rel-17 To:RAN2 Cc:RAN1

* Noted

[R2-2202159](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202159.zip) LS on R17 NR MG enhancements – Pre-configured MG (R4-2202615; contact: Intel) RAN4 LS in Rel-17 To:RAN2

* Noted

[R2-2202160](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202160.zip) Reply LS on R17 NR MG enhancements – Pre-configured MG (R4-2202616; contact: CATT) RAN4 LS in Rel-17 To:RAN2

* Noted

[R2-2202161](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202161.zip) LS on R17 MG enhancement - NCSG (R4-2202626; contact: Apple) RAN4 LS in Rel-17 To:RAN2 Cc:RAN1

* Noted

[R2-2203844](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203844.zip) LS on collision handling of concurrent MGs (R4-2206788; contact: MediaTek) RAN4 LS in Rel-17 NR\_MG\_enh-Core To:RAN2 Cc:RAN1

- MTK propose to take into acct in RRC discussion

- vivo wonder if priority is just RRC or whether MAC is impacted as well. MTK think RRC only, and R4 will define UE behaviour for the priority.

- vivo wonder if R4 considers all kinds of gaps. MTK think this si just for concurrent mgaps, for others there would need to be additional discussion.

- Apple think there is no change related to RACH / UL gaps.

- ZTE would like to check with R4 delegates, and would prefer to discuss next meeting. Nokia think ti would be good to just add into the CR even if it need to be modified later.

* Noted, take into acct in the RRC discussion

[R2-2203845](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203845.zip) LS on R17 NR MG enhancements – Pre-configured MG (R4-2206789; contact: Huawei & Intel) RAN4 LS in Rel-17 NR\_MG\_enh-Core To:RAN2

- Apple think that for deactivated Scell there is RRC impact.

- MTK prefer to leave guidelines for configuration just to network impl, can discuss 1st part if needed. for the last part not clear whether there is RRC impact

- Intel think that the first part is just impl. For second part, epositioning may define other methods.

- Nokia think that the intention is that UE shall indicate to the network for second part.

- Intel think R4 now has specified an additional mechanism, don’t understand why needed, in Pos Session RRC method was disagreed.

* For first part RAN2 assumes triggering can be handled by network impl, UE combination may need to be reflected, discuss this in the RRC discussion.
* Separate offline discussion on last part, if we decide to not challenge the second part in this offline it can be part of the RRC CR.

#### 8.22.1.3 CRs and Rapporteur Resolutions

Tdoc Limitation: 0.

CR Rapporteurs to provide running CRs, potentially updated, Provide resolution proposals to Rapporteur Handled Open Issues. See also R2-2202054

Concurrent MG:

- C1-4: Simultaneously support of legacy gap and concurrent gap

- C1-5: Simultaneously support of per-UE gap and per-FR gap

- C1-6: Support of gap sharing for concurrent gap

* [AT117-e][065][MGE] RRC (MediaTek)

Scope: Treat [R2-2202877](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202877.zip). Determine agreeable parts, points for discussion, open issues if needed. Converge offline if possible. Can also open for comments on [R2-2202868](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202868.zip). Take into account LS in’s.

Intended outcome: Report, CR solutions, Agreed RRC CR

Deadline: If needed,on-line CB W2 Thursday, otherwise EOM or Short Post

R2-2203880 Report of [AT117-e][065][MGE] RRC (MediaTek) MediaTek Inc. discussion Rel-17 NR\_MG\_enh-Core

[R2-2202868](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202868.zip) Introduction of RRC signaling for measurement gap enhancement MediaTek Inc. CR Rel-17 38.331 16.7.0 2913 - B NR\_MG\_enh-Core R2-2201903

=> Revised in R2-2203881

R2-2203881 Introduction of RRC signaling for measurement gap enhancement MediaTek Inc. CR Rel-17 38.331 16.7.0 2913 1 B NR\_MG\_enh-Core

[R2-2202877](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202877.zip) Rapporteur resolution for MGE open issues MediaTek Inc. discussion

* [065] Noted

### 8.22.3 Open Issues

#### 8.22.3.1 Pre-discussions

Tdoc Limitation: 0.

Pre117-e discussions to gather company input on specific Open Issues See also R2-2202054

Concurrent MG

C1-1: Whether to use ToAddModList and ToReleaseList structure

C1-2: In addition to the per frequency layer association, define ASN.1 for per use case (e.g. PRS, SSB, CSI-RS, EUTRA) association with concurrent gaps.

C1-3: Maximum support of concurrent gaps

C1-7: Potential Configuration restriction for associated gap ID configuration in measObjectNR

NCSG MG

N1-1: It is FFS whether to support reporting of NCSG for E-UTRA target bands

N1-4: Whether the NCSG could be configured as per FR gap

N1-5: Whether to add a new IE for NCSG gap configuration or reuse the legacy GapConfig with some extension

Companies to provide input into the following discussion:

[Pre117-e][010][MGE] MGE Open Issues Input (MediaTek)

[R2-2202899](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202899.zip) Report of [Pre117-e][010][MGE] MGE Open Issues Input (MediaTek) MediaTek Inc. discussion Late

DISCUSSION online

P567 first then P1 etc

P5

- QC think there should be a separate capability for E-UTRA target bands. MTK would be ok.

P1

- ZTE think this should be used also for gap sharing config. MTK agrees.

P2

- HW think association to use case can same some signalling. Oppo support coarse association as it reduces signalling overhead.

- and some opposition.

- Chair think it is a pure signalling optimization.

P4.1

- OPPO wonder how to capture this in the TS. MTK think this could be done, e.g. by field descr or other way.

P4.2

- ZTE wonder if R2 can decide, better to ask R4. MTK would be ok to ask R4, think it is not common use case to have same freq. HW think multiple MO are different frequencies. Nokia also agrees that this scenario is not supported by R4. MTK think R4 LS may allow it.

- CATT support this proposal.

- LG think we don’t need any restriction in RRC, can be left to smart network impl.

- Chair final comment P4.2: It seems we need no agreement. Unless a need is found, we don’t specify any RRC restriction for the case of when multiple MOs (with the same CSI-RS center frequency) are configured, e.g. to mandate that the network associates the same MG for the CSI-RS measurement in each MO.

* RAN2 confirms that reporting of NCSG for E-UTRA target bands is supported. RAN2 assumes that support for EUTRA target bands can be a separate UE cap
* RAN2 confirms that NCSG could be configured as per FR gap.
* Reuse the legacy GapConfig with some extension for NCSG gap configuration.
* For additional gap configuration in concurrent gap, use ToAddModList and ToReleaseList structure for each gap type to add or release the additional gaps, and gap sharing configuration to be consistent.
* For concurrent gap, RAN2 confirms that there is no need to support coarse granularity association (i.e. per use case such as CSI-RS, SSB measurement) since the agreed fine granularity (per frequency layer) could cover this case.
* FFS the maximum number of measurement gap ID. This could be discussed in gap coordination section.
* Baseline assumption When multiple MOs (with the same SSB frequency) are configured, the network associates the same MG for the SSB measurement in each MO. Details sorted out in CR disc

#### 8.22.3.2 Invited Input

Company input by tdocs. See also R2-2202054

##### 8.22.3.2.1 Pre-configured MG patterns

Company input on the following Open Issues

- P1-1: Discuss support of case 4 where NW signals the pre-configured gap and BWP status via RRC, then UE follows BWP status to activates/deactivates gap upon BWP switching

- P1-2: Support pre-configured MG under CA based on BWP switching on a single CC

[R2-2203523](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203523.zip) [Pre117-e][018][MGE] AI Summary of 8.22.3.2.1 Pre-configured MG patterns (Intel) Intel Corporation

DISCUSSION only P1 due to lack of time

P1

- Ericsson think less and less companies are supporting this, and this is not needed, it is redundant. ZTE think it is not clear how network will use this signalling. Huawei agrees. Samsung also think this is redundant, we should not support this without an LS.

- Oppo has no strong opinion, suggest to just follow R4. Vivo think this was agreed in R4, see no reason to remove it. Intel support, and cpl other.

- Intel think that a main argument is to sort out state confusion between the network and the UE.

* RAN2 introduces support of NW-Controlled activation/deactivation pre-configured gap

Continue offline with remaining proposals P2 ..

* [AT117-e][018][MGE] Pre-configured MG patterns (Intel)

Scope: Based on [R2-2203523](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203523.zip), progress remaining proposals. Determine agreeable parts, points for discussion, open issues if needed. Converge as far as possible to reduce the need for on-line discussion

Intended outcome: Report

Deadline: In time for on-line CB W2 Tuesday

CLOSED

[R2-2203757](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203757.zip) [AT117-e][018][MGE] Pre-configured MG patterns (Intel) Intel Corporation discussion Rel-17 NR\_MG\_enh-Core

* RAN2 agree to support of CA scenario for pre-configured gap.
* RAN2 agree to support in signalling CA scenario for pre-configured MG with no limitation on BWP switching operation as in legacy. (not limited to only single CC switch at a time)
* Network configures per BWP per MG status for each CC to support CA scenario for Network-controlled activation/ deactivation support of pre-configured MG.
* RAN2 can support UE autonomous activation/deactivation mechanism without specification impact under CA case if the UE combines rule will be in RAN4 spec.
* If network-controlled activation/deactivation (explicit indicator) is provided, UE follow the explicit status indicator and does not use implicit rule (UE autonomous activation/deactivation).
* The activation/deactivation status of the specific BWP is included in the configuration of BWP

[R2-2202461](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202461.zip) Support of pre-configured MG under CA Intel Corporation discussion Rel-17 NR\_MG\_enh-Core

[R2-2202460](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202460.zip) Discussion on support of case 4 Intel Corporation discussion Rel-17 NR\_MG\_enh-Core

[R2-2202322](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202322.zip) Discussion on per-configured measurement gap vivo discussion Rel-17 NR\_MG\_enh-Core

[R2-2203504](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203504.zip) Pre-Configured gap case-4 discussion Qualcomm Incorporated discussion Rel-17 38.331 NR\_MG\_enh-Core

[R2-2203448](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203448.zip) Pre-configured measurement gaps Ericsson discussion Rel-17 NR\_MG\_enh-Core

[R2-2202890](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202890.zip) Discussion on Pre-configured MG Huawei, HiSilicon discussion Rel-17 NR\_MG\_enh-Core

[R2-2202647](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202647.zip) Remaining issues on Pre-configured MG ZTE Corporation, Sanechips discussion Rel-17 NR\_MG\_enh-Core

[R2-2203037](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203037.zip) Remaining issues on Pre-configured MG LG Electronics Inc discussion Rel-17

[R2-2202513](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202513.zip) RAN2 impact from pre-MG Apple discussion Rel-17 NR\_MG\_enh-Core

[R2-2203260](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203260.zip) Discussion on open issues for pre-configured MG Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_MG\_enh-Core

[R2-2202873](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202873.zip) Discussion on open issue of pre-configured gap MediaTek Inc. discussion

[R2-2202944](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202944.zip) Discussion on remaining issues of pre-configured MG CATT discussion Rel-17 NR\_MG\_enh-Core

[R2-2202977](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202977.zip) Discussion on Pre-MG activation and deactivation Samsung discussion

[R2-2203011](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203011.zip) Discussion on the support of Pre-MG for CA Samsung R&D Institute India discussion

[R2-2203060](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203060.zip) Discussion on Pre-configured MG Xiaomi Communications discussion

* [018] 15 tdocs Noted

##### 8.22.3.2.2 Network Controlled Small Gap

Company input on the following Open Issues

- N1-6: Introduction of signalling for enabling the derivation of SSB indexes of target cell(s) on a frequency different than serving cell frequency from serving cell timing, to increase NCSG efficiency.

- N1-7: Whether the reporting of R17 gap requirement information (e.g. needForNCSG-InfoNR) should be combined with R16 gap requirement information (i.e. NeedForGapsInfoNR) or the R17 NCSG requirement information could be reported independently.

* [AT117-e][019][MGE] Network Controlled Small Gap (Apple)

Scope: Based on [R2-2203713](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203713.zip), determine agreeable parts, points for discussion, open issues if needed. Converge as far as possible to reduce the need for on-line discussion.

Intended outcome: Report

Deadline: In time for on-line CB W2 Tuesday

CLOSED

[R2-2203904](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203904.zip) Summary of [AT117-e][019][MGE] Network Controlled Small Gap (Apple) Apple discussion Rel-17 NR\_MG\_enh-Core

DISCUSSION

- Apple indicates that P3 is already in the RRC CR.

P1-5

P3

- QC think this is discussed in R4 and R4 will make these fields dep on each other.

- LG wonder what it means, does the UE ignore the legacy IE if the new one is provided? Think the new feature can be used only if cells are synchronized.

- Nokia think indeed we need a new field, and we have the old. If R4 decides something we can follow them.

- MTK think we just wait for R4.

- Chair: We just stick with current running CR and await further input from R4

**P1, P2, P4, P5 are agreed:**

* RAN2 to support enabling derivation of SSB indexes of target cell on inter-frequency from serving cell timing.
* Introduce one new field (e.g, deriveSSB-IndexFromCell-Inter-r17) which refers to IE ServCellIndex, into SSB-ConfigMobility inside MeasObjectNR.
* Do not need to support the optimized RRC configuration to allow NW to indicate the new field (e.g, deriveSSB-IndexFromCell-Inter-r17) even if the MO is regarded as intra-frequency MO.
* Do not introduce the new field (e.g, deriveSSB-IndexFromCell-Inter-r17) into SIB4/RRCRelease message.

**P6, P7, P8 are agreed:**

* Proposal 6: To support independent Rel-17 NCSG reporting from Rel-16 NeedForGap reporting.
* Proposal 7: There is no need to allow simultaneous configurations on Rel-16 NeedForGap and Rel-17 NCSG reporting.
* Proposal 8: Agree to introduce R17 NCSG information into inter-node HandoverPreparationInformation message.

[R2-2203713](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203713.zip) [Pre117-e][019][MGE] AI summary of 8.22.3.2.2 Network Controlled Small Gap (Apple) Apple discussion Rel-17 NR\_MG\_enh-Core

[R2-2202323](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202323.zip) Discussion on NCSG vivo discussion Rel-17 NR\_MG\_enh-Core

[R2-2202512](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202512.zip) RAN2 impact from NCSG Apple discussion Rel-17 NR\_MG\_enh-Core

[R2-2202648](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202648.zip) Remaining issues on NCSG ZTE Corporation, Sanechips discussion Rel-17 NR\_MG\_enh-Core

[R2-2202874](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202874.zip) Discussion on open issue of NCSG MediaTek Inc. discussion

[R2-2202891](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202891.zip) Discussion on NCSG Huawei, HiSilicon discussion Rel-17 NR\_MG\_enh-Core

[R2-2202945](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202945.zip) Discussion on remaining issues of NCSG CATT discussion Rel-17 NR\_MG\_enh-Core

[R2-2203012](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203012.zip) On Network Controlled Small Gaps Samsung discussion

[R2-2203261](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203261.zip) Discussion on open issues for NCSG Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_MG\_enh-Core

[R2-2203449](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203449.zip) Network Controlled Small Gap Ericsson discussion Rel-17 NR\_MG\_enh-Core

[R2-2203503](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203503.zip) SSB index derivation for NCSG Qualcomm Incorporated CR Rel-17 38.331 16.7.0 2964 - B NR\_MG\_enh-Core

* [019] 11 tdocs Noted

### 8.22.4 UE capabilities

Features / UE caps developed in RAN2. Input should not overlap with input to previous subclauses. Note that this AI is complementary to AI 8.0.2.

* [AT117-e][020][MGE] UE capabilites (Intel)

Scope: Ph1:Based on [R2-2203522](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203522.zip). Determine agreeable parts, points for discussion, open issues if needed. Converge as far as possible to reduce the need for on-line discussion.

Ph2: Treat [R2-2202462](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202462.zip) and [R2-2202463](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202463.zip), collect comments revise accordingly and endorse.

Intended outcome: Ph2: Endorsed CRs for merge

Deadline: Ph2: EOM

[R2-2203758](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203758.zip) [AT117-e][020][MGE] UE capabilites (Intel) Intel Corporation discussion Rel-17 NR\_MG\_enh-Core

DISCUSSION

- Huawei wonder if a R17 UE that does not support NCSG can use the request for gap instead of the R16 need for gap. Apple think this is not currently the assumption, but it could be made possible, prefer clean solution. MTK think that a UE that support NCSG signalling need to support at least one NCSG pattern. Chair think we should not focus on this case for this meeting, but can discuss at next meeting if this should be allowed.

**P1, P3, P5 are agreed:**

* introduce (A) UE capability to support NCSG as indicated in RAN4 feature list as a baseline. It can be removed if no longer needed after more input from RAN4 on (B) UE capability to support NCSG pattern.
* introduce 1 bit UE capability to support concurrent gap.
* introduce separate UE capability for pre-configured measurement gap as follow:

Pre-configured measurement gap with network-controlled activation and deactivation mechanism

Pre-configured measurement gap with UE autonomous activation and deactivation mechanism

**P2, P4, P6, P7 are also agreed (but need to care to avoid double work with R4):**

* Wait for more input from RAN4 on (B) UE capability to support NCSG pattern.
* FFS additional UE capability for support perUE concurrent gap for index 2 only in addition to concurrent gap.
* FFS on if CA and non-CA case should have separate UE capability.
* FFS pre-configured gap should be FR differentiated.

[R2-2203522](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203522.zip) [Pre117-e][020][MGE] AI summary of 8.22.4 UE capabilities (Intel) Intel Corporation

[R2-2202879](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202879.zip) Discussion on UE capabilities of MGE MediaTek Inc. discussion

[R2-2202324](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202324.zip) Discussion on capability for MG enhancement vivo discussion Rel-17 NR\_MG\_enh-Core

[R2-2202892](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202892.zip) Discussion on UE capability for MGE Huawei, HiSilicon discussion Rel-17 NR\_MG\_enh-Core

[R2-2203065](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203065.zip) Discussion on UE capabilities for gap enhancement Xiaomi Communications discussion

[R2-2203450](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203450.zip) UE capabilities for MGE Ericsson discussion Rel-17 NR\_MG\_enh-Core

* [020] 6 tdocs Noted

[R2-2202462](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202462.zip) UE capability for NR and MR-DC measurement gap enhancements Intel Corporation draftCR Rel-17 38.306 16.7.0 B NR\_MG\_enh-Core

=> Revised in [R2-2203759](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203759.zip)

[R2-2203759](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203759.zip) UE capability for NR and MR-DC measurement gap enhancements Intel Corporation draftCR Rel-17 38.306 16.7.0 B NR\_MG\_enh-Core

[R2-2202463](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202463.zip) UE capability for NR and MR-DC measurement gap enhancements Intel Corporation draftCR Rel-17 38.331 16.7.0 B NR\_MG\_enh-Core

=> Revised [R2-2203760](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203760.zip)

[R2-2203760](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203760.zip) UE capability for NR and MR-DC measurement gap enhancements Intel Corporation draftCR Rel-17 38.331 16.7.0 B NR\_MG\_enh-Core

### 8.22.5 Other

Issues not covered elsewhere.

[R2-2203262](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203262.zip) Discussion on other open issues for MGE Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_MG\_enh-Core

## 8.23 Uplink Data Compression (UDC)

(NR\_UDC\_enh-Core; leading WG: RAN2; REL-17; WID: RP-211203)

Time budget: 0

Tdoc Limitation: 1 tdocs

Finalization of CRs, resolution of FFS. Technical discussion will be mainly offline

* [AT117-e][051][UDC] Open Issues and CRs (CATT)

Scope: Ph1 Address the UDC Open Issues aiming to close all, Collect comments on major issues and/or blocking points in the provided CRs if any.

Ph2 Continued discussion aiming for CR agreement (offline only).

Intended outcome: Report if useful ,Agreed CRs and endorsed UE capability CRs (for Merge)

Deadline: EOM (if Needed, the non-UE cap CRs can continue in a Post disc).

[R2-2203838](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203838.zip) Report of [AT117-e][051][UDC] Open Issues and CRs (CATT) – Phase 1 CATT discussion Rel-17 NR\_UDC-Core

DISCUSSION

P2

- LGE prefer to have a note if to specify, the UE behaviour is clear in the current TS. OPPO agrees with LG that current text is clear and nothing is needed.

- Samsung think majority prefer to change normative text, and have different opinion to LGE.

- Huawei think the clarification is needed / useful, and think there are risk for mistakes otherwise, prefer normative text but could accept a note. Vivo agrees.

- Apple think that in the light of possible preprocessing a clarification is needed

- LGE think the change is too much, note or simplification. Main point is how to handle preprocessed packets that were already compressed.

- QC think O2 would be ok.

P3

- Apple prefers a restriction.

- MTK think we need to capture that UE is allowed to not compress.

- LGE, ZTE think that nothing need to be captured in the TS

P4

- LGE think this can be good to have, but can accept to not do this.

* No additional inter-node coordination between MN and SN is needed on top of what has been specified in the current RRC CR in [R2-2203108](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203108.zip).
* Related to drb-ContinueUDC, assume that we modify the normative text, but the modification should be simpler than Option 2, details in the CR discussion.
* RAN2 recognizes that the UE is not expected to handle peak data rates with UDC, but No additional UE capability restriction is introduced in terms of maximum uplink data rate for NR UDC. UE is allowed to not compress, in case data rate is higher than what the UE is capable of. FFS if any of this need to be captured in a TS (can be discussed in the CR discussion)
* No enhancement is introduced to handle the potential issue of PDCP PDUs to be discarded by the network side

### 8.23.1 Organizational

Rapporteur input, CRs.

[R2-2203107](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203107.zip) Introduction of the support for UDC in NR CATT, CMCC, Huawei, HiSilicon, MediaTek Inc., Ericsson, China Unicom, China Telecom, OPPO, ZTE, Samsung, Apple, Nokia, Nokia Shanghai Bell CR Rel-17 38.300 16.8.0 0415 - B NR\_UDC-Core

[R2-2203108](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203108.zip) Introduction of the support for UDC in NR CATT, CMCC, Huawei, HiSilicon, MediaTek Inc., Ericsson, China Unicom, China Telecom, OPPO, ZTE, Samsung, Apple, Nokia, Nokia Shanghai Bell CR Rel-17 38.331 16.7.0 2927 - B NR\_UDC-Core

[R2-2203109](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203109.zip) Introduction of the support for UDC in NR CATT, CMCC, Huawei, HiSilicon, MediaTek Inc., Ericsson, China Unicom, China Telecom, OPPO, ZTE, Samsung, Apple, Nokia, Nokia Shanghai Bell CR Rel-17 38.323 16.6.0 0087 - B NR\_UDC-Core

=> Revised in R2-2204094

R2-2204094 Introduction of the support for UDC in NR CATT, CMCC, Huawei, HiSilicon, MediaTek Inc., Ericsson, China Unicom, China Telecom, OPPO, ZTE, Samsung, Apple, Nokia, Nokia Shanghai Bell CR Rel-17 38.323 16.6.0 0087 1 B NR\_UDC-Core

[R2-2203110](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203110.zip) Introduction of UE capabilities for NR UDC CATT, CMCC, Huawei, HiSilicon, MediaTek Inc., Ericsson, China Unicom, China Telecom, OPPO, ZTE, Samsung, Apple, Nokia, Nokia Shanghai Bell draftCR Rel-17 38.306 16.7.0 B NR\_UDC-Core

=> Revised in R2-2204095

R2-2204095 Introduction of UE capabilities for NR UDC CATT, CMCC, Huawei, HiSilicon, MediaTek Inc., Ericsson, China Unicom, China Telecom, OPPO, ZTE, Samsung, Apple, Nokia, Nokia Shanghai Bell draftCR Rel-17 38.306 16.7.0 B NR\_UDC-Core

[R2-2203111](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203111.zip) Introduction of the support for UDC in NR CATT, CMCC, Huawei, HiSilicon, MediaTek Inc., Ericsson, China Unicom, China Telecom, OPPO, Samsung, Apple, Nokia, Nokia Shanghai Bell CR Rel-17 37.340 16.8.0 0298 - B NR\_UDC-Core

[R2-2203112](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203112.zip) Introduction of UE capabilities for NR UDC CATT, CMCC, Huawei, HiSilicon, MediaTek Inc., Ericsson, China Unicom, China Telecom, OPPO, ZTE, Samsung, Apple, Nokia, Nokia Shanghai Bell draftCR Rel-17 38.331 16.7.0 B NR\_UDC-Core

### 8.23.2 General

Open issues, Data rate limit capability, FFS on inter-Node Signalling

[R2-2202367](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202367.zip) Limit UL data rate for UDC in UE capability MediaTek Inc., Samsung discussion Late

[R2-2202442](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202442.zip) Consideration on NR UDC OPPO discussion Rel-17 NR\_UDC-Core

[R2-2202520](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202520.zip) UDC constraints and limitations Apple discussion Rel-17 NR\_UDC-Core

[R2-2202678](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202678.zip) Clarification on PDCP SDU for UDC continuity Samsung Electronics discussion NR\_UDC-Core

[R2-2202961](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202961.zip) Remaining issues on NR UDC Qualcomm Incorporated discussion Rel-17 NR\_UDC-Core

[R2-2203023](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203023.zip) Discussion on remaining issues for UDC Huawei, HiSilicon discussion Rel-17 NR\_UDC-Core

[R2-2203106](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203106.zip) Considerations on NR UDC open issues CATT discussion Rel-17 NR\_UDC-Core

[R2-2203164](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203164.zip) Discussion on UDC LG Electronics Inc. discussion NR\_UDC-Core

[R2-2203249](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203249.zip) Furhter Consideration on UDC in NR ZTE Corporation,Sanechips discussion Rel-17 NR\_UDC-Core

* [051] 9 tdocs above are Noted

## 8.24 NR R17 Other

Time budget: 1.5 TU

Includes items and topics without specific R2 Agenda Item. Includes LS in for R17 items not in a specific R2 Agenda Item. In general incoming LSes are always treated with high priority regardless if specific AI or TU allocation exists.

### 8.24.0 In-principle agreed CRs

In-principle agreed CRs and related documents.

* [AT117-e][052][NR17] IPA CRs (Xiaomi)

Scope: Treat [R2-2202765](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202765.zip), [R2-2202766](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202766.zip), [R2-2203714](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203714.zip), [R2-2203715](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203715.zip), [R2-2203123](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203123.zip), [R2-2203124](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203124.zip), [R2-2202151](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202151.zip), [R2-2203138](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203138.zip), [R2-2203139](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203139.zip), [R2-2203322](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203322.zip), [R2-2203323](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203323.zip). Check the CRs (incl cover sheet) determine revisions if needed. Agree CRs (submitted or revisions).

Intended outcome: Report, Agreed CRs, Endorsed UE cap CRs (or draft CRs) (38306, 38331) for Merge.

Deadline: Schedule 1

R2-2203897 Report of [AT117-e][052][NR17] IPA CRs (Xiaomi) Xiaomi (Rapporteur) discussion Rel-17

* [052] Noted, agreements reflected below

NR FR2 FWA Bn257 Bn258

[R2-2202765](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202765.zip) Introducing UE capability for power class 5 for FR2 FWA SoftBank, Huawei, HiSilicon, Nokia CR Rel-17 38.306 16.7.0 0687 - C NR\_FR2\_FWA\_Bn257\_Bn258-Core

* [052] endorsed (for merge)

[R2-2202766](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202766.zip) Introducing UE capability for power class 5 for FR2 FWA SoftBank, Huawei, HiSilicon, Nokia CR Rel-17 38.331 16.7.0 2905 - C NR\_FR2\_FWA\_Bn257\_Bn258-Core

=> Revised in R2-2203836

R2-2203836 Introducing UE capability for power class 5 for FR2 FWA SoftBank, Huawei, HiSilicon, Nokia CR Rel-17 38.331 16.7.0 2905 1 C NR\_FR2\_FWA\_Bn257\_Bn258-Core

* [052] endorsed (for merge)

NR RF FR1 enh - Max MIMO layers for SUL

[R2-2203714](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203714.zip) Draft CR: Remove the maximum number of MIMO layers configuration restrictions for SUL CMCC, Huawei, HiSilicon, CATT CR Rel-17 38.306 16.7.0 0532 1 C NR\_RF\_FR1\_enh

Chair comment: the title should not use the wording Draft CR.

=> Revised in R2-2203864

R2-2203864 Remove the maximum number of MIMO layers restrictions for SUL CMCC, Huawei, HiSilicon, CATT CR Rel-17 38.306 16.7.0 0532 2 C NR\_RF\_FR1\_enh

* [052] agreed (not to be merged)

[R2-2203715](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203715.zip) Remove the maximum number of MIMO layers configuration restrictions for SUL CMCC, Huawei, HiSilicon, CATT CR Rel-17 38.331 16.7.0 2465 1 C NR\_RF\_FR1\_enh

=> Revised in R2-2203865

R2-2203865 Remove the maximum number of MIMO layers configuration restrictions for SUL CMCC, Huawei, HiSilicon, CATT CR Rel-17 38.331 16.7.0 2465 2 C NR\_RF\_FR1\_enh

* [052] Agreed

BCS4 BCS5

[R2-2203123](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203123.zip) Introduction of BCS4 and BCS5 Xiaomi Communications CR Rel-17 38.331 16.7.0 2871 2 B NR\_BCS4-Core R2-2201834

=> Revised in R2-2203898

R2-2203898 Introduction of BCS4 and BCS5 Xiaomi Communications CR Rel-17 38.331 16.7.0 2871 3 B NR\_BCS4-Core

* [052] Endorsed (for merge)

[R2-2203124](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203124.zip) Introduction of BCS4 and BCS5 Xiaomi Communications CR Rel-17 38.306 16.7.0 0669 2 B NR\_BCS4-Core R2-2201835

=> Revised in R2-2203899

R2-2203899 Introduction of BCS4 and BCS5 Xiaomi Communications CR Rel-17 38.306 16.7.0 0669 3 B NR\_BCS4-Core

* [052] Endorsed (for merge)

[R2-2202151](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202151.zip) Reply LS on NR CA capability for BCS5 (R4-2201295; contact: Xiaomi) RAN4 LS in Rel-17 To:RAN2

* [052] Noted

NR SAR PC2 Inter-band CA and SUL

[R2-2203138](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203138.zip) CR to TS 38.306 on UE capability for UE power class 2 NR inter-band CA and SUL configurations China Telecom, Huawei, HiSilicon CR Rel-17 38.306 16.7.0 0651 2 B NR\_SAR\_PC2\_interB\_SUL\_2BUL R2-2111499

=> Revised in R2-2203999

R2-2203999 CR to TS 38.306 on UE capability for UE power class 2 NR inter-band CA and SUL configurations China Telecom, Huawei, HiSilicon CR Rel-17 38.306 16.7.0 0651 3 B NR\_SAR\_PC2\_interB\_SUL\_2BUL

* [052] Endorsed (for merge)

[R2-2203139](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203139.zip) CR to TS 38.331 on UE capability for UE power class 2 NR inter-band CA and SUL configurations China Telecom, Huawei, HiSilicon CR Rel-17 38.331 16.7.0 2829 1 B NR\_SAR\_PC2\_interB\_SUL\_2BUL R2-2110426

=> Revised in R2-2204000

R2-2204000 CR to TS 38.331 on UE capability for UE power class 2 NR inter-band CA and SUL configurations China Telecom, Huawei, HiSilicon CR Rel-17 38.331 16.7.0 2829 2 B NR\_SAR\_PC2\_interB\_SUL\_2BUL

* [052] Endorsed (for merge)

DL 1024QAM

Chair Comment: the 38331 CR was previously endorsed/agreed-in-principle, the 38300 CR is new, they should be treated together

[R2-2203322](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203322.zip) Introduction of DL 1024QAM for NR Ericsson, Nokia, Nokia Shanghai Bell CR Rel-17 38.331 16.7.0 2940 - B NR\_DL1024QAM\_FR1-Core

=> Revised in R2-2203962

R2-2203962 Introduction of DL 1024QAM for NR Ericsson, Nokia, Nokia Shanghai Bell CR Rel-17 38.331 16.7.0 2940 1 B NR\_DL1024QAM\_FR1-Core

* [052] agreed

[R2-2203323](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203323.zip) Introduction of DL 1024QAM for NR Ericsson, Nokia, Nokia Shanghai Bell CR Rel-17 38.300 16.8.0 0420 - B NR\_DL1024QAM\_FR1-Core

=> Revised in R2-2203963

R2-2203963 Introduction of DL 1024QAM for NR Ericsson, Nokia, Nokia Shanghai Bell CR Rel-17 38.300 16.8.0 0420 1 B NR\_DL1024QAM\_FR1-Core

* [052] agreed

### 8.24.1 RAN4 led Items

e.g. TxD, TX switching, BCS4/5

LS in

[R2-2202150](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202150.zip) LS UE capability for supporting single DCI transmission schemes for multi-TRP (R4-2120652; contact: Apple) RAN4 LS in Rel-16 To:RAN1 Cc:RAN2

* [000] Noted

[R2-2202152](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202152.zip) LS on CORESET#0 impact of CBW narrower than 40MHz of n79 (R4-2202286; contact: Samsung) RAN4 LS in Rel-17 To:RAN1 Cc:RAN2

* [000] Noted

Late LS in

[R2-2203885](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203885.zip) Reply LS on interruption for PUCCH SCell activation in invalid TA case (R1-2202599; contact: MediaTek) RAN1 LS in Rel-17 NR\_RRM\_enh2-Core To:RAN4 Cc:RAN2

[R2-2203995](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203995.zip) Reply LS on beam information of PUCCH SCell in PUCCH SCell activation procedure (R1-2202778; contact: Huawei) RAN1 LS in Rel-17 NR\_RRM\_enh2-Core To:RAN2, RAN4

NR RF FR1 enh - DC location Reporting

RAN2 sent an LS out from last meeting in R2-2201978 (QC). Await R4 reply.

[R2-2203134](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203134.zip) Discussion on the DC location report for more than 2CC Huawei, HiSilicon discussion Rel-17 NR\_RF\_FR1-Core

NR RF FR1 enh - UL TX Switching

Offline, CB on-line W2 if needed

* [AT117-e][053][NR17] UL TX Switching (China Telecom)

Scope: Treat [R2-2203117](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203117.zip), [R2-2202812](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202812.zip), [R2-2202814](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202814.zip), [R2-2203114](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203114.zip), [R2-2202813](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202813.zip), [R2-2203115](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203115.zip), [R2-2203116](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203116.zip). Determine agreeable parts. Agree/endorse CRs.

Intended outcome: Report, Agreed CRs, Endorsed UE cap CRs (or draft CRs) (38306, 38331) for Merge.

Deadline: EOM

[R2-2203997](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203997.zip) Summary of [AT117-e][053][NR17] UL TX Switching (China Telecom) China Telecom discussion Rel-17 NR\_RF\_FR1\_enh-Core

* [053] Noted, agreements reflected below

**Potential agreeable part of this offline discussion:**

Based on the majority views, the rapporteur thinks the following Phase 1 proposals highlighted in Yellow are non-controversial and ready for agreement.

**Proposal 1 (for agreement): The stage-2 CR R2-2202814 will be revised for approval in the next phase, taking the comments in Phase 1 into account.**

**Proposal 2 (for agreement): Further discuss the wording of the baseline 38.306 CR for UL Tx switching in Phase 2, taking the comments in Phase 1 into account.**

**Proposal 3 (for agreement): RAN2 discusses the detail design of UL-MIMO coherence capability reporting for Rel-17 2Tx-2Tx switching based on RAN4 agreement in Phase 2.**

**Proposal 4 (for agreement): Taking the draft CRs R2-2203115 and R2-2203116 as baseline for Phase 2 discussion on the detail design of UL-MIMO coherence capability reporting for Rel-17 2Tx-2Tx switching.**

**Remaining issues for further discussion:**

Besides, there are still some remaining issues that companies’ views are not converged in Phase 1 discussion. The rapporteur suggests further discussing on the following issue in Phase 2.

* Proposal 5 (for discussion): Regarding how to handle the FFS captured in the endorsed running CR on switching option capability reporting for 1Tx-2Tx and 2Tx-2Tx, leave it for Phase 2 discussion

During the Phase 2 discussion, only 3 companies provide views on the above issue. To hear more company views, the rapporteur gives the following Phase 2 proposals.

**Phase 2-Proposal 1 (for discussion): RAN2 further discusses the following way-forward,**

* **Way-forward: Remove the sentence of “FFS: whether switching option can be reported differently for 1T2T and 2T2T” from the running CR, if RAN1 can’t reach an agreement on this issue in the Feb RAN1 meeting. And RAN2 can capture “same or different switching option capability is up to RAN1” in Chair Notes.**

[R2-2203117](C:\\Users\\mtk65284\\Documents\\3GPP\\tsg_ran\\WG2_RL2\\TSGR2_117-e\\Docs\\R2-2203117.zip" \o "C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203117.zip) Discussion on remaining issues for UL Tx switching enhancement China Telecom, Huawei, HiSilicon discussion Rel-17 NR\_RF\_FR1\_enh

* [053] Noted

[R2-2202812](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202812.zip) RRC configuration for UL Tx switching enhancement Huawei, HiSilicon, China Telecom, Apple, CATT CR Rel-17 38.331 16.7.0 2909 - B NR\_RF\_FR1\_enh-Core

=> Revised in [R2-2203986](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203986.zip)

[R2-2203986](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203986.zip) RRC configuration for UL Tx switching enhancement Huawei, HiSilicon, China Telecom, Apple, CATT CR Rel-17 38.331 16.7.0 2909 1 B NR\_RF\_FR1\_enh-Core

* [053] Agreed

[R2-2202814](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202814.zip) stage 2 CR for UL Tx switching enhancement Huawei, HiSilicon, China Telecom CR Rel-17 38.300 16.8.0 0411 - F NR\_RF\_FR1\_enh-Core

=> Revised in [R2-2203987](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203987.zip)

[R2-2203987](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203987.zip) stage 2 CR for UL Tx switching enhancement Huawei, HiSilicon, China Telecom CR Rel-17 38.300 16.8.0 0411 1 B NR\_RF\_FR1\_enh-Core

* [053] Agreed

[R2-2203114](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203114.zip) Running CR to TS38.306 to support Tx switching enhancements (UE capability) China Telecom, Huawei, HiSilicon, Apple, CATT draftCR Rel-17 38.306 16.7.0 B NR\_RF\_FR1\_enh

=> Revised in R2-2203998

R2-2203998 Introduction of Rel-17 Tx switching enhancements China Telecom, Huawei, HiSilicon, Apple, CATT draftCR Rel-17 38.306 16.7.0 B NR\_RF\_FR1\_enh

* [053] endorsed (for Merge)

[R2-2202813](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202813.zip) UE capability reporting for UL Tx switching enhancement Huawei, HiSilicon, China Telecom, Apple, CATT draftCR Rel-17 38.331 16.7.0 NR\_RF\_FR1\_enh-Core R2-2201940

=> Revised in R2-2203988

R2-2203988 UE capability reporting for UL Tx switching enhancement Huawei, HiSilicon, China Telecom, Apple, CATT draftCR Rel-17 38.331 16.7.0 NR\_RF\_FR1\_enh-Core

* [053] endorsed (for Merge)

[R2-2203115](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203115.zip) Draft CR to TS 38.306 on UL-MIMO coherence capability reporting for Rel-17 2Tx-2Tx switching China Telecom, Huawei, HiSilicon draftCR Rel-17 38.306 16.7.0 F NR\_RF\_FR1\_enh

[R2-2203116](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203116.zip) Draft CR to TS 38.331 on UL-MIMO coherence capability reporting for Rel-17 2Tx-2Tx switching China Telecom, Huawei, HiSilicon draftCR Rel-17 38.331 16.7.0 F NR\_RF\_FR1\_enh

NR RRM enh - PUCCH SCell activation I

Initial instructions: Wait for another LS from R1 (expected at end of W1). Then treat offline. If needed CB online at end of W2.

Updated: The LS from R1 is late, Postpone this issue to Q2.

* [AT117-e][054][NR17] PUCCH SCell Activation (Huawei)

Scope: Delay start of this discussion until R1 has provided another LS (expected end of W1), and take the R1 LS and decisions into account. Treat [R2-2202815](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202815.zip), [R2-2202816](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202816.zip), [R2-2202817](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202817.zip), [R2-2202499](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202499.zip), [R2-2202450](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202450.zip), [R2-2202884](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202884.zip), [R2-2203318](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203318.zip), [R2-2202219](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202219.zip). Determine agreeable parts, e.g. whether TS change is needed and for which release. Agree CRs if applicable and LS out.

Intended outcome: Report, Approved LS out, Agreed CRs (if applicable)

Deadline: EOM

CANCELLED

[R2-2202815](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202815.zip) Summary of [AT116bis-e][033][NR17] (Huawei) Huawei, HiSilicon report Rel-17 NR\_RRM\_enh2-Core R2-2201933

Was not treated last meeting

[R2-2202816](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202816.zip) [Draft] Reply LS on beam information of PUCCH SCell in PUCCH SCell activation procedure Huawei, HiSilicon LS out Rel-17 NR\_RRM\_enh2-Core To:RAN4, RAN1

[R2-2202817](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202817.zip) Draft CR for Clarification of PUCCH group description Huawei, HiSilicon draftCR Rel-17 38.300 16.8.0 F NR\_RRM\_enh2-Core

[R2-2202449](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202449.zip) CR to Clarification of PUCCH group definition OPPO CR Rel-17 38.300 16.8.0 0404 - F NR\_RRM\_enh2-Core

[R2-2202450](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202450.zip) Discusson on concept of PUCCH group OPPO discussion Rel-17 NR\_RRM\_enh2-Core

[R2-2202884](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202884.zip) PUCCH group definition Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_RRM\_enh2-Core

[R2-2203318](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203318.zip) Clarification on PUCCH primary and secondary group definition Ericsson CR Rel-15 38.300 15.13.0 0418 - F NR\_newRAT-Core

Moved from 5.2

[R2-2203319](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203319.zip) Clarification on PUCCH primary and secondary group definition Ericsson CR Rel-16 38.300 16.8.0 0419 - A NR\_newRAT-Core

Moved from 5.2

NR RRM enh - PUCCH SCell activation II

Treat offline, conditional start: await R1 reply LS

* [AT117-e][055][NR17] PUCCH SCell Activation Invalid TA (CATT)

Scope: Delay start of this discussion until R1 has replied to the LS in R2-2200133/R4-2120420, and take the R1 reply into account. Treat [R2-2202149](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202149.zip), [R2-2203016](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203016.zip), [R2-2203017](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203017.zip)

Intended outcome: Report, Approved LS out (if need for TS change is identified, outcome should also include CRs).

Deadline: EOM

[R2-2202149](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202149.zip) LS on interruption for PUCCH SCell activation in invalid TA case (R4-2120420; contact: MediaTek, CATT) RAN4 LS in Rel-17 To:RAN1, RAN2

* [055] Noted

[R2-2203016](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203016.zip) Discussion on interruption for PUCCH SCell activation in invalid TA case CATT discussion Rel-17 NR\_RRM\_enh2-Core

* [055] Noted

[R2-2203017](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203017.zip) [Draft] Reply LS on interruption for PUCCH SCell activation in invalid TA case CATT LS out Rel-17 NR\_RRM\_enh2-Core To:RAN4 Cc:RAN1

R2-2203834 Discussion on interruption for PUCCH SCell activation in invalid TA case CATT discussion Rel-17 NR\_RRM\_enh2-Core

R2-2203835 Reply LS on interruption for PUCCH SCell activation in invalid TA case CATT LS out Rel-17 NR\_RRM\_enh2-Core To:RAN4 Cc:RAN1

**NR HST FR1**

Offline, On-line CB W2 only if needed

* [AT117-e][056][NR17] FR1 HST (CMCC)

Scope: Treat [R2-2202171](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202171.zip), [R2-2202157](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202157.zip), [R2-2202869](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202869.zip), [R2-2202870](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202870.zip). Ph1 Determine agreeable parts and converge on discussion points if any, Ph2 agree CRs (and Reply LS only if needed).

Intended outcome: Report, Agreed CR 38331, endorsed UE cap CRs (or draft CRs) (38306, 38331) for Merge.

Deadline: Schedule 1

[R2-2202171](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202171.zip) LS on signaling for FR1 HST CA demodulation (R4-2202984; contact: CMCC) RAN4 LS in Rel-17 To:RAN2

* [056] Noted

[R2-2202157](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202157.zip) LS on signalling for inter-frequency measurement enhancement in connected state for FR1 HST (R4-2202591; contact: CMCC) RAN4 LS in Rel-17 To:RAN2

* [056] Noted

[R2-2202630](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202630.zip) Introduction of RRM enhancements for Rel-17 NR FR1 HST CMCC, Ericsson, Huawei, Nokia CR Rel-17 38.331 16.7.0 2898 - B NR\_HST\_FR1\_enh Revised

Was previously agreed-in-principle. Now revised

[R2-2202869](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202869.zip) Introduction of RRM enhancements for Rel-17 NR FR1 HST CMCC, Ericsson, Huawei, Nokia, Qualcomm CR Rel-17 38.331 16.7.0 2898 1 B NR\_HST\_FR1\_enh [R2-2202630](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202630.zip)

=> Revised in R2-2203852

R2-2203852 Introduction of RRM enhancements for Rel-17 NR FR1 HST CMCC, Ericsson, Huawei, Nokia, Qualcomm CR Rel-17 38.331 16.7.0 2898 2 B NR\_HST\_FR1\_enh

* [056] Agreed

[R2-2202631](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202631.zip) Introduction of RRM enhancements for Rel-17 NR FR1 HST CMCC, Ericsson, Huawei, Nokia CR Rel-17 38.306 16.7.0 0683 - B NR\_HST\_FR1\_enh Revised

Was previously agreed-in-principle. Now revised

[R2-2202870](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202870.zip) Introduction of RRM enhancements for Rel-17 NR FR1 HST CMCC, Ericsson, Huawei, Nokia, Qualcomm CR Rel-17 38.306 16.7.0 0683 1 B NR\_HST\_FR1\_enh [R2-2202631](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202631.zip)

=> Revised in R2-2203853

R2-2203853 Introduction of RRM enhancements for Rel-17 NR FR1 HST CMCC, Ericsson, Huawei, Nokia, Qualcomm CR Rel-17 38.306 16.7.0 0683 2 B NR\_HST\_FR1\_enh

* [056] Endorsed (for merge)

R2-2203854 Introduction of Rel-17 NR FR1 HST capability to 38.331 CMCC, Ericsson, Huawei, Nokia draftCR Rel-17 38.331 16.7.0 - B NR\_HST\_FR1\_enh

* [056] Endorsed (for merge)

**NR HST FR2**

Offline, On-line CB W2 only if needed

* [AT117-e][057][NR17] FR2 HST (Nokia)

Scope: Treat [R2-2202167](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202167.zip), [R2-2203187](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203187.zip), [R2-2203188](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203188.zip), [R2-2202867](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202867.zip),. Ph1 Determine agreeable parts and converge on discussion points if any, Ph2 agree CRs (and Reply LS only if needed).

Intended outcome: Report, Agreed CR 38331, endorsed UE cap CRs (or draft CRs) (38306, 38331) for Merge.

Deadline: Schedule 1

[R2-2202167](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202167.zip) LS on network signaling for Rel-17 NR FR2 HST RRM (R4-2202765; contact: Nokia) RAN4 LS in Rel-17 To:RAN2

[R2-2203187](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203187.zip) HST on FR2 Nokia, Nokia Shanghai Bell CR Rel-17 38.331 16.7.0 2933 - B NR\_HST\_FR2 Late

=> Revised in R2-2203812

R2-2203812 HST on FR2 Nokia, Nokia Shanghai Bell CR Rel-17 38.331 16.7.0 2933 1 B NR\_HST\_FR2

[R2-2203188](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203188.zip) HST on FR2 Nokia, Nokia Shanghai Bell CR Rel-17 38.306 16.7.0 0692 - B NR\_HST\_FR2 Late

=> Revised in R2-2203813

R2-2203813 HST on FR2 Nokia, Nokia Shanghai Bell CR Rel-17 38.306 16.7.0 0692 1 B NR\_HST\_FR2

[R2-2202867](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202867.zip) On the signaling for RRM enhancements for Rel-17 FR2 HST Huawei, HiSilicon draftCR Rel-17 38.331 16.7.0 B NR\_HST\_FR2

R2-2203814 Capability signaling for HST on FR2 Nokia, Nokia Shanghai Bell CR Rel-17 38.331 16.7.0 2965 - B NR\_HST\_FR2

RF FR2 - UL Gap

Offline, On-line CB W2 only if needed

* [AT117-e][058][NR17] FR2 UL Gap (Apple)

Scope: Treat [R2-2202155](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202155.zip), [R2-2202156](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202156.zip), R2-2202508, [R2-2202918](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202918.zip), [R2-2202510](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202510.zip), [R2-2202511](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202511.zip), [R2-2202507](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202507.zip), [R2-2202509](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202509.zip). Ph1 Determine agreeable parts and converge on discussion points if any, Ph2 agree CRs (and Reply LS only if needed).

Intended outcome: Report, Agreed CRs, endorsed UE cap CRs (38306, 38331) for Merge.

Deadline: Schedule 1

CLOSED Continue with CRs in a Post discussion

* [Post117-e][058][NR17] FR2 UL Gap CRs (Apple)

Scope: Reflect progress including R2 117-e. Take into account late LS from RAN4. CR approval

Intended outcome: Agreed CRs

Deadline: Short Post

Chair: note this discussion will be too late for UE cap merge so just agree separate CRs.

[R2-2203903](C:\\Users\\mtk65284\\Documents\\3GPP\\tsg_ran\\WG2_RL2\\TSGR2_117-e\\Docs\\R2-2203903.zip" \o "C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203903.zip) Summary of [AT117-e][058][NR17] FR2 UL Gap (Apple) Apple discussion Rel-17 NR\_RF\_FR2\_req\_enh2

* [058] Noted, agreements reflected below

[R2-2202155](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202155.zip) Reply LS to RAN2 on UL gap in FR2 RF enhancement (R4-2202419; contact: Apple) RAN4 LS in Rel-17 To:RAN2

[R2-2202156](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202156.zip) LS to RAN2 on UL gap in FR2 RF enhancement (R4-2202420; contact: Apple) RAN4 LS in Rel-17 To:RAN2

* [058] Both Noted

[R2-2202506](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202506.zip) RAN2 impact from FR2 UL gap Apple discussion Rel-17 NR\_RF\_FR2\_req\_enh2

* [058] Noted
* [058] In NR-DC, timing reference for FR2 UL gap is based on the SFN/subframe of FR2 serving cell.
* [058] SN configures FR2 UL gap to UE if FR2 bands are only configured in SCG.
* [058] In NR-DC without FR2-FR2 band combination, there is no need to support MN and SN coordination to enable FR2 UL gap.
* [058] FR2 UL gap design does not support NR-DC with FR2-FR2 band combination. FFS how to capture the restriction in spec.

[R2-2202918](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202918.zip) Introduction of FR2 UL gap Apple R&D CR Rel-17 37.340 16.8.0 0295 - B NR\_RF\_FR2\_req\_enh2

[R2-2202507](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202507.zip) Introduction of FR2 UL gap Apple CR Rel-17 38.331 16.7.0 2893 - B NR\_RF\_FR2\_req\_enh2

* [058] In TS 38.331, for FR2 UL gap configuration, capture the values of *ugl* with {0.125ms, 0.25ms, 0.5ms, 1.0ms}, and the values of *ugrp* with {5ms, 20ms, 40ms, 160ms}.
* [058] Capture that UE indicates the preferred FR2 UL gap patterns using UAI message in TS 38.331.

[R2-2202509](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202509.zip) Introduction of FR2 UL gap Apple CR Rel-17 38.321 16.7.0 1191 - B NR\_RF\_FR2\_req\_enh2

* [058] Reflect that RACH procedure is prioritized over FR2 UL gap in TS 38.321.

[R2-2202510](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202510.zip) Introduction of FR2 UL gap UE capability Apple draftCR Rel-17 38.331 16.7.0 B NR\_RF\_FR2\_req\_enh2

[R2-2202511](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202511.zip) Introduction of FR2 UL gap UE capability Apple draftCR Rel-17 38.306 16.7.0 B NR\_RF\_FR2\_req\_enh2

* [058] Wait for more input from RAN4 on FR2 UL gap UE capability.

RF FR2 - CA BW Classes and CBM

Offline

* [AT117-e][059][NR17] FR2 CA BW Classes and CBM (Nokia)

Scope: Treat [R2-2202377](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202377.zip), [R2-2202904](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202904.zip), [R2-2203122](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203122.zip), [R2-2203024](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203024.zip), [R2-2202905](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202905.zip), [R2-2202389](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202389.zip), [R2-2202390](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202390.zip), [R2-2202910](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202910.zip), [R2-2202911](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202911.zip), [R2-2202912](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202912.zip), [R2-2202913](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202913.zip), [R2-2203493](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203493.zip), [R2-2203494](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203494.zip), [R2-2202365](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202365.zip), [R2-2202366](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202366.zip). Ph1 Determine agreeable parts and converge on discussion points if any, Ph2 agree CRs and Reply LS out.

Intended outcome: Report, Agreed CRs (CRs with certain early impl. character need to be separate CRs), Approved LS out

Deadline: Schedule 1

R2-2203973 Offline [AT117-e][059][NR17] FR2 CA BW Classes and CBM (Nokia) Nokia (Rapporteur) discussion Rel-17 NR\_RF\_FR2\_req\_enh2-Core

* [059] Noted, agreements reflected below

[R2-2202904](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202904.zip) Consideration on the FR2 CA bandwidth classes ZTE Corporation, Sanechips discussion Rel-17 NR\_RF\_FR2\_req\_enh2-Core

[R2-2203122](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203122.zip) Introduction of new FR2 CA bandwidth classes Xiaomi Communications discussion Rel-17 NR\_RF\_FR2\_req\_enh2-Core R2-2201385

[R2-2203024](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203024.zip) Discussion on FR2 new bandwidth class Huawei, HiSilicon discussion Rel-17 NR\_RF\_FR2\_req\_enh2-Core

[R2-2202905](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202905.zip) Consideration on the CBM/IBM reporting ZTE Corporation, Sanechips discussion Rel-17 NR\_RF\_FR2\_req\_enh2-Core

* [059] 4 tdocs noted
* [059] on both these topics wait for RAN4 progress (postpone)

[R2-2202389](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202389.zip) Introduction of FR2 FBG2 CA BW classes Nokia, Nokia Shanghai Bell CR Rel-17 38.331 16.7.0 2867 1 B NR\_RF\_FR2\_req\_enh2-Core R2-2200839

=> Revised in [R2-2203974](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203974.zip)

[R2-2203974](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203974.zip) Introduction of FR2 FBG2 CA BW classes Nokia, Nokia Shanghai Bell CR Rel-17 38.331 16.7.0 2867 2 B NR\_RF\_FR2\_req\_enh2-Core

* [059] Endorsed as baseline for further work (not for R17 merge, not for TSG RAN)

[R2-2202390](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202390.zip) Introduction of FR2 FBG2 CA BW classes Nokia, Nokia Shanghai Bell CR Rel-17 38.306 16.7.0 0678 - B NR\_RF\_FR2\_req\_enh2-Core

=> Revised in [R2-2203975](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203975.zip)

[R2-2203975](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203975.zip) Introduction of FR2 FBG2 CA BW classes Nokia, Nokia Shanghai Bell CR Rel-17 38.306 16.7.0 0678 1 B NR\_RF\_FR2\_req\_enh2-Core

* [059] Endorsed as baseline for further work (not for R17 merge, not for TSG RAN)

[R2-2202912](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202912.zip) CR on the CBM/IBM reporting-38331 ZTE Corporation, Sanechips CR Rel-17 38.331 16.7.0 2916 - B NR\_RF\_FR2\_req\_enh2-Core

=> Revised in [R2-2204005](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204005.zip)

[R2-2204005](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204005.zip) CR on the CBM/IBM reporting-38331 ZTE Corporation, Sanechips, Nokia, Nokia Shanghai Bell CR Rel-17 38.331 16.7.0 2916 1 B NR\_RF\_FR2\_req\_enh2-Core

- [056] Rapporteur proposes that the CRs in R2-2204005/R2-2204006 are endorsed as a baseline and agreed when RAN4 updates the feature list in accordance with R16 capability

* [059] Endorsed as baseline for further work (not for R17 merge, not for TSG RAN)

[R2-2202913](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202913.zip) CR on the CBM/IBM reporting-38306 ZTE Corporation, Sanechips CR Rel-17 38.306 16.7.0 0690 - B NR\_RF\_FR2\_req\_enh2-Core

=> Revised in [R2-2204006](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204006.zip)

[R2-2204006](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204006.zip) CR on the CBM/IBM reporting-38306 ZTE Corporation, Sanechips, Nokia, Nokia Shanghai Bell CR Rel-17 38.306 16.7.0 0690 1 B NR\_RF\_FR2\_req\_enh2-Core

* [059] Endorsed as baseline for further work (not for R17 merge, not for TSG RAN)

[R2-2202910](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202910.zip) CR on the FR2 CA bandwidth classes-38331 ZTE Corporation, Sanechips CR Rel-17 38.331 16.7.0 2915 - B NR\_RF\_FR2\_req\_enh2-Core

[R2-2202911](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202911.zip) CR on the FR2 CA bandwidth classes-38306 ZTE Corporation, Sanechips CR Rel-17 38.306 16.7.0 0689 - B NR\_RF\_FR2\_req\_enh2-Core

[R2-2203493](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203493.zip) Introduction of new FR2 CA bandwidth classes Huawei, HiSilicon draftCR Rel-17 38.331 16.7.0 B NR\_RF\_FR2\_req\_enh2-Core

[R2-2203494](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203494.zip) Introduction of new FR2 CA bandwidth classes Huawei, HiSilicon draftCR Rel-17 38.306 16.7.0 B NR\_RF\_FR2\_req\_enh2-Core

[R2-2202365](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202365.zip) Introduction of CBM capability Nokia, Nokia Shanghai Bell CR Rel-17 38.331 16.7.0 2868 1 B NR\_RF\_FR2\_req\_enh2-Core R2-2200840

[R2-2202366](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202366.zip) Introduction of CBM capability Nokia, Nokia Shanghai Bell CR Rel-17 38.306 16.7.0 0668 1 B NR\_RF\_FR2\_req\_enh2-Core R2-2200841

* [059] 6 not pursued

[R2-2202377](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202377.zip) Reply LS on release independence aspects of newly introduced FR2 CA BW Classes and CBM/IBM UE capability Nokia, Nokia Shanghai Bell LS out Rel-17 NR\_RF\_FR2\_req\_enh2-Core R2-2200843 To:RAN4

Not Treated

Withdrawn

R2-2202508 Introduction of FR2 UL gap Apple CR Rel-17 38.300 16.8.0 0406 - B NR\_RF\_FR2\_req\_enh2 Withdrawn

### 8.24.2 RAN1 led Items

e.g. DSS

DSS

Offline

* [AT117-e][060][NR17] DSS (Ericsson)

Scope: Treat [R2-2202214](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202214.zip), [R2-2202215](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202215.zip), [R2-2202216](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202216.zip). Take into account an expected RAN1 LS to resolve Open issues for CR in [R2-2202216](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202216.zip). If the expected LS arrives late, e.g. at EOM, the discussion can be continued as a Post meeting discussion.

Intended outcome: Report, Agreed CRs

Deadline: EOM.

R2-2203729 Summary of [AT117-e][060][NR17] DSS (Ericsson) Ericsson discussion Rel-17 NR\_DSS\_enh

[R2-2202214](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202214.zip) Plan for finalization of Rel-17 DSS in RAN2 Ericsson discussion NR\_DSS\_enh

[R2-2202215](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202215.zip) Introduction of NR dynamic spectrum sharing Ericsson CR Rel-17 38.300 16.8.0 0400 - B NR\_DSS\_enh

=> Revised in R2-2203842

R2-2203842 Introduction of NR dynamic spectrum sharing Ericsson CR Rel-17 38.300 16.8.0 0400 1 B NR\_DSS-Core

[R2-2202216](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202216.zip) Introduction of NR dynamic spectrum sharing Ericsson CR Rel-17 38.331 16.7.0 2878 - B NR\_DSS\_enh

=> Revised in R2-2203843

R2-2203843 Introduction of NR dynamic spectrum sharing Ericsson CR Rel-17 38.331 16.7.0 2878 1 B NR\_DSS-Core

### 8.24.3 Other

**n77**

Offline: Can collect one round of comments to see if there are RAN2 apsects that need to be initially considered.

* [AT117-e][061][NR17] n77 variants (Bell Mobility)

Scope: Treat [R2-2202183](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202183.zip). Collect one round of comments, based on comments determine whether any action need to be taken by RAN2 (or whether to just wait for RAN4). IF actions are to be taken, CB online W2 Monday

Intended outcome: Report

Deadline: W1 Friday

[R2-2203850](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203850.zip) Report of [AT117-e][061][NR17] n77 variants (Bell Mobility) Bell Mobility (Rapporteur) discussion Rel-17

DISCUSSION

- Bell Mob reports that RAN4 are progressing and may send an LS to RAN2 in any case.

- Chair: Adding new bands or variants is primarily RAN4 responsibility. As we didn’t find any particular R2’ish aspects that need to be communicated, we just wait for R4, or TSG RAN.

* RAN2 waits for RAN4 (or TSG RAN)

[R2-2202183](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202183.zip) Discussion on devices certified for a subset of a 3GPP band Bell Mobility discussion Rel-17

* [061] Noted

MINT

Offline, CB online W2 only if needed

* [AT117-e][062][NR17] MINT (Ericsson)

Scope: Treat [R2-2202176](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202176.zip), [R2-2202226](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202226.zip), [R2-2202264](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202264.zip), [R2-2202256](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202256.zip), [R2-2202257](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202257.zip), [R2-2202258](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202258.zip), [R2-2202259](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202259.zip), [R2-2202260](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202260.zip), [R2-2202261](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202261.zip), [R2-2202262](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202262.zip), [R2-2202263](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202263.zip). Ph1 Check the CRs, converge on discussion points if any and determine agreeable parts, Ph2 finally agree CRs.

Intended outcome: Report, Agreed CRs, endorsed NR UE cap CRs (38306, 38331) for Merge.

Deadline: EOM.

[R2-2203874](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203874.zip) Report [AT117-e][062][NR17] MINT (Ericsson) Ericsson discussion Rel-17 TEI17

* [062] Noted, agreements reflected below

[R2-2202176](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202176.zip) Reply LS on LS on MINT functionality for Disaster Roaming (S3-214342; contact: LGE) SA3 LS in Rel-17 To:SA2 Cc:SA5, CT1, CT4, CT6, RAN2, SA, CT, RAN

[R2-2203726](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203726.zip) Reply LS on MINT functionality for Disaster Roaming (S2-2201514; contact: LGE) SA2 LS in Rel-17 MINT To:SA3, CT4 Cc:SA5, CT1, CT6, RAN2, SA, CT, RAN

[R2-2204065](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204065.zip) LS on UAC enhancements and system information extensions for minimization of service interruption (C1-221600; contact: Nokia) CT1 LS in Rel-17 MINT To:RAN2 Cc:SA1

[R2-2204081](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204081.zip) Reply LS on Reply LS on MINT functionality for Disaster Roaming (S3-220518; contact: LGE SA3 LS in Rel-17 MINT To:SA2 Cc:SA5, CT1, CT4, CT6, RAN2, SA, CT, RAN

* [062] 4 LS ins are Noted

[R2-2202226](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202226.zip) Further discussion on open issues for MINT Lenovo, Motorola Mobility discussion Rel-17 MINT

[R2-2202264](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202264.zip) Remaining issues for MINT Ericsson discussion Rel-17 TEI17

* [062] 2 discussion papers are noted

[R2-2202256](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202256.zip) Introduction of MINT Ericsson, Lenovo, Motorola Mobility CR Rel-17 36.300 16.7.0 1352 - B TEI17 R2-2201845

=> Revised in R2-2203866

R2-2203866 Introduction of MINT [MINT] Ericsson, Lenovo, Motorola Mobility CR Rel-17 36.300 16.7.0 1352 1 B TEI17

[R2-2202257](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202257.zip) Introduction of MINT Ericsson, Lenovo, Motorola Mobility CR Rel-17 36.304 16.6.0 0839 - B TEI17 R2-2201847

=> Revised in R2-2203867

R2-2203867 Introduction of MINT [MINT] Ericsson, Lenovo, Motorola Mobility CR Rel-17 36.304 16.6.0 0839 1 B TEI17

[R2-2202258](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202258.zip) Introduction of MINT Ericsson, Lenovo, Motorola Mobility CR Rel-17 36.306 16.7.0 1837 - B TEI17 R2-2201849

=> Revised in R2-2203868

R2-2203868 Introduction of MINT [MINT] Ericsson, Lenovo, Motorola Mobility CR Rel-17 36.306 16.7.0 1837 1 B TEI17

[R2-2202259](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202259.zip) Introduction of MINT Ericsson, Lenovo, Motorola Mobility CR Rel-17 36.331 16.7.0 4755 - B TEI17 R2-2201843

=> Revised in R2-2203869

R2-2203869 Introduction of MINT [MINT] Ericsson, Lenovo, Motorola Mobility CR Rel-17 36.331 16.7.0 4755 1 B TEI17

[R2-2202260](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202260.zip) Introduction of MINT Ericsson, Lenovo, Motorola Mobility CR Rel-17 38.300 16.8.0 0402 - B TEI17 R2-2201844

=> Revised in R2-2203870

R2-2203870 Introduction of MINT [MINT] Ericsson, Lenovo, Motorola Mobility CR Rel-17 38.300 16.8.0 0402 1 B TEI17

[R2-2202261](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202261.zip) Introduction of MINT Ericsson, Lenovo, Motorola Mobility CR Rel-17 38.304 16.7.0 0226 - B TEI17 R2-2201846

=> Revised in R2-2203871

R2-2203871 Introduction of MINT [MINT] Ericsson, Lenovo, Motorola Mobility CR Rel-17 38.304 16.7.0 0226 1 B TEI17

[R2-2202262](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202262.zip) Introduction of MINT Ericsson, Lenovo, Motorola Mobility CR Rel-17 38.306 16.7.0 0676 - B TEI17 R2-2201848

=> Revised in R2-2203872

R2-2203872 Introduction of MINT [MINT] Ericsson, Lenovo, Motorola Mobility CR Rel-17 38.306 16.7.0 0676 1 B TEI17

[R2-2202263](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202263.zip) Introduction of MINT Ericsson, Lenovo, Motorola Mobility CR Rel-17 38.331 16.7.0 2883 - B TEI17 R2-2201842

=> Revised in R2-2203873

R2-2203873 Introduction of MINT [MINT] Ericsson, Lenovo, Motorola Mobility CR Rel-17 38.331 16.7.0 2883 1 B TEI17

# 9 Rel-17 EUTRA Work Items

## 9.0 EUTRA Rel-17 General

Tdoc Limitation: 0 tdocs

No documents should be submitted to 9.0. Please submit to 9.0.x

### 9.0.1 L1 parameters and cross-WI RRC aspects

This agenda item may use a summary document (decision made based on submitted contributions).

Including RRC details on L1 parameters for Rel-17 WIs that require discussion in the common session or are related to multiple Rel-17 WIs.

### 9.0.2 Feature Lists and UE capabilities

This agenda item may use a summary document (decision made based on submitted contributions).

Including UE capability details based on RAN1/4 inputs that are not covered by other WIs or require discussion in the common session due to affecting multiple Rel-17 LTE WIs.

## 9.1 NB-IoT and eMTC enhancements

(NB\_IOTenh4\_LTE\_eMTC6-Core; leading WG: RAN1; REL-17; WID: RP-211340)

Time budget: 1 TU

Tdoc Limitation: 1 tdocs

### 9.1.1 Organizational

LS in

36.300 running CR (Huawei)

36.331 running CR (Qualcomm)

36.304 running CR (Nokia)

36.306 running CR (ZTE)

[R2-2202124](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202124.zip) LS on Coverage-Based Carrier Selection (R3-221162; contact: Nokia) RAN3 LS in Rel-17 To:RAN2

[R2-2202427](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202427.zip) Introduction of NB-IoT/eMTC Enhancements Qualcomm Incorporated CR Rel-17 36.331 16.7.0 4760 - B NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2202743](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202743.zip) 36306 running CR for NB-IoT eMTC ZTE Corporation, Sanechips CR Rel-17 36.306 16.7.0 1841 - B NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2203216](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203216.zip) Introduction of Rel-17 enhancements for NB-IoT and eMTC Huawei, HiSilicon CR Rel-17 36.300 16.7.0 1354 - B NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2203217](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203217.zip) Introduction of Rel-17 enhancements for NB-IoT and eMTC Huawei, HiSilicon CR Rel-17 36.302 16.1.0 1211 - B NB\_IOTenh4\_LTE\_eMTC6-Core

### 9.1.2 Open Issues

Outcomes of:

[Pre117-e][301][NBIOT/eMTC R17] NB-IoT carrier selection (ZTE)

[Pre117-e][302][NBIOT/eMTC R17] Capabilities open issues (Huawei)

[Pre117-e][303][NBIOT/eMTC R17] Other open issues (Ericsson)

[R2-2202739](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202739.zip) Report of [Pre117e-301] Carrier selection open issues ZTE Corporation, Sanechips report Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core Late

[R2-2202745](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202745.zip) ASN.1 issue and RAN3 impact of carrier selection ZTE Corporation, Sanechips discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2203218](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203218.zip) Report of [Pre117-e][302][NBIOT/eMTC R17] Capabilities open issues (Huawei) Huawei, HiSilicon report Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core Late

[R2-2203384](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203384.zip) Report on [Pre117-e][303][NBIOTeMTC R17] Other open issues (Ericsson) Ericsson report Rel-17 Late

### 9.1.3 Other

## 9.2 NB-IoT and eMTC support for NTN

(LTE\_NBIOT\_eMTC\_NTN; leading WG: RAN1; REL-17; WID: RP‑211601)

Time budget: 0.5 TU

Tdoc Limitation: 4 tdocs

RP 93e: An LS was sent to SA asking about NAS support for discontinous coverage and WUS. Understanding that RAN work on discontinous coverage shall continue for now (also WUS work if any is needed).

### 9.2.1 General

#### 9.2.1.1 Organizational

Tdoc Limitation: 0

Planning etc

#### 9.2.1.2 LS in

Tdoc Limitation: 0

LS in. For LSes that need action or has impact beyond taking into account by CR rapporteurs: One tdoc by contact company (one company) to address the LS and potential reply is considered Rapporteur Input and may be provided.

[R2-2202105](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202105.zip) Reply LS on EPS support for IoT NTN in Rel-17 (C1-220532; contact: MediaTek) CT1 LS in Rel-17 To:SA2, RAN2, CT, RAN, SA Cc:CT4, RAN3

* Noted

[R2-2202135](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202135.zip) LS on opens issues for NB-IoT and eMTC support for NTN (R3-221406; contact: Nokia) RAN3 LS in Rel-17 To:SA2, SA3, RAN2

Nokia are ok to wait with LS out until UE cap is done

* Noted

Offline for reply LS (Nokia) EOM

* [AT117-e][093][IoT-NTN] Open Issues Reply LS (Nokia)

Scope: Reply LS to RAN3

Intended outcome: Approved LS out

Deadline: EOM (offline only)

[R2-2203928](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203928.zip) LS Response to LS on UE providing Location Information for NB-IoT (S2-2201333; contact: Qualcomm) SA2 LS in Rel-17 5GSAT\_ARCH To:RAN2 Cc:RAN3, CT1, SA3, SA3-LI

[R2-2204071](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204071.zip) Reply LS on UE providing Location Information for NB-IoT (C1-222100; contact: Apple) CT1 LS in Rel-17 LTE\_NBIOT\_eMTC\_NTN To:RAN2, RAN3, SA2 Cc:SA3, SA3-Li

[R2-2204083](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204083.zip) Reply LS on opens issues for NB-IoT and eMTC support for NTN (S3-220543; contact: Xiaomi) SA3 LS in Rel-17 LTE\_NBIOT\_eMTC\_NTN To:RAN3 Cc:SA2, RAN2

[R2-2204084](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204084.zip) Reply LS on security concerns for UE providing Location Information for NB-IoT (S3-220544; contact: Xiaomi) SA3 LS in Rel-17 LTE\_NBIOT\_eMTC\_NTN To:RAN2 Cc:SA3-LI, RAN3, SA2, CT1

#### 9.2.1.3 CRs and Rapporteur Resolutions

Tdoc Limitation: 0.

CR Rapporteurs to provide running CRs, potentially updated, Provide resolution proposals to Rapporteur Handled Open Issues. See also R2-2202053

Control Plane

OI 2.4 [CR rapporteur handled issue] FFS whether t-Service applies to higher priority frequencies

OI 2.5 [CR rapporteur handled issue] Change/amend text on location registration related to TAU in NTN

OI 2.10 [CR rapporteur handled issue] Signalling of Part-of ARFCN indication in MIB for NB-IoT

* [Post117-e][088][IoT-NTN] 36.331 CR (Huawei)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][089][IoT-NTN] 36.304 CR (Ericsson)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][090][IoT-NTN] 36.321 CR (MediaTek)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][091][IoT-NTN] 36.300 CR (Ericsson)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

* [Post117-e][092][IoT-NTN] 36.306 CR (Nokia)

Scope: Reflect progress including R2 117-e. CR approval

Intended outcome: Agreed CR

Deadline: Short Post

[R2-2203220](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203220.zip) OI 2.10: Signalling of part-of-ARFCN indication in MIB in NB-IOT Huawei, HiSilicon discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

DISCUSSION brief

- Ericsson wonder if not R4 need to have a look

- QC think this is a R1 agreement, think it can be added in the CR, but wonder why three bits are needed, two should be sufficient.

- Chair think we can have an Editors note to not forget about potential R4 input

* We go ahead with this, can discuss the details offline

[R2-2203219](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203219.zip) Support of Non-Terrestrial Network in NB-IoT and eMTC Huawei CR Rel-17 36.331 16.7.0 4771 - B LTE\_NBIOT\_eMTC\_NTN

[R2-2203455](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203455.zip) IoT NTN Stage 2 CR Ericsson, Eutelsat CR Rel-17 36.300 16.7.0 1356 - B LTE\_NBIOT\_eMTC\_NTN

[R2-2203456](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203456.zip) IoT NTN Idle mode CR Ericsson CR Rel-17 36.304 16.6.0 0843 - B LTE\_NBIOT\_eMTC\_NTN

[R2-2203457](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203457.zip) IoT NTN Idle mode Open issue resolutions Ericsson discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

[R2-2202744](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202744.zip) draft Running CR to 36.306 for IoT-NTN UE capabilities Nokia Solutions & Networks (I) draftCR Rel-17 36.306 16.7.0 B IoT\_NTN\_enh-Core

### 9.2.3 Open Issues

TBD how to handle Open issues that are the same as for NR NTN

#### 9.2.3.1 Pre-discussions

Tdoc Limitation: 0.

Pre117-e discussions to gather company input on specific Open Issues See also R2-2202053

User Plane

OI 1.1a [Pre117-e-offline] Decide on a suitable name and contents for the MAC CE corresponding K\_Offset.

OI 1.1b [Pre117-e-offline] Decide on a suitable name and contents for the UE-specific TA Report MAC CE.

OI 1.2 [Pre117-e-offline]: How to extend SR-Prohibit Timer in IoT-NTN?

OI 1.3 [Pre117-e-offline]: How to extend RLC t-Reordering Timer and PDCP Discard Timer in IoT NTN?

OI 1.4 [Pre117-e-offline]: Decide whether to use LCID or eLCID for UE-specific TA Report MAC CE.

O1 1.5 [Pre117-e-offline]: Decide whether to use LCID or eLCID for MAC CE corresponding K\_Offset.

OI 1.6 [Pre117-e-offline]: Decide whether the threshold-based TA-Trigger needs to deviate from NR-NTN agreements

OI 1.7 [Pre117-e-offline]: Decide whether we need different behavior for different re-configurations e.g., Re-establishment, Handover

OI 1.8 [Pre117-e-offline]: Decide if TA reporting in connected mode is not controlled by enabling/disabling indication in SI?

OI 1.9 [Pre117-e-offline]: What's the logical channel priority of the TA report MAC CE, e.g., compared with other MAC CEs?

Control Plane

OI 2.1 [Pre117-e-offline]: Define a new barring bit for NTN UEs barring.

OI 2.6 [Pre117-e-offline] If some mechanism is needed to trigger the UE to reacquire the NTN specific SIB in RRC\_IDLE

OI 2.7 [Pre117-e-offline] If anything additional is needed on expiry of the UL synchronisation timer

OI Provision of SIBxx in dedicated signalling at HO

Discontinuous Coverage

OI 3.1 [Pre117-e-offline]: Decide on the maximum number of satellites, whose ephemeris (assistance) information will be provided.

OI 3.2 [Pre117-e-offline]: How to signal this information (new SIB for this purpose or dedicated signaling)?

OI 3.3 [Pre117-e-offline]: Decide if average ephemeris and almanac information should be used for estimating discontinuous coverage. Take into account the size and feasibilty of specifying almanac.

OI 3.4 [Pre117-e-offline]: What will be the UE behavior on receiving this ephemeris information?

Companies to provide input into the following discussions:

[Pre117-e][011][IoT-NTN] User plane Open Issues Input (OPPO)

[Pre117-e][012][IoT-NTN] Control plane Open Issues Input (Huawei)

[Pre117-e][013][IoT-NTN] Discontinous Coverage Open Issues Input (MediaTek)

[R2-2203160](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203160.zip) Summary of [Pre117-e][011][IoT-NTN] User plane Open Issues Input OPPO discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN Late

DISCUSSION not concluded due to lack of time

- Chair: Can we agree all proposals marked for agreement, is there any proposal that cannot be agreed?

- Huawei: 11a don’t see the need for a condition, can just report.

- Ericsson: P1 P2 P4 P5 has not been agreed yet for NR NTN and they may not be exactly consistent with this. Interdigital proposes that we anyway can agree to align naming and Field descriptions with NR NTN.

- QC P6 think we will run out of codes, think we can re-purpose codes instead.

- Ericsson: P3 think it is sometimes important to have small size, but can use eLCID

- Chair: Think LCID situation is different for NB-IoT and eMTC, think we don’t need identical solutions.

- P12 CMCC think threshold based will only involve TA value and not location into.

- Chair: It seems that discussion is indeed needed even for the seemingly agreeable proposals.

* Align naming and field descr with NR NTN wrt P1 P2 P4 P5.
* [AT117-e][011][IoT-NTN] User Plane (OPPO)

Scope: Based on [R2-2203160](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203160.zip) and related on-line discussion + based on [R2-2203721](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203721.zip) issue on cfg of event triggered TA report and issue Whether SR is triggered if no available/sufficient UL-SCH resources for the triggered TA reporting.

- For items that are dependent on NR NTN, kick off the relevant discussion points once NR NTN decision has been taken. For items with no dependency, discussion can be kicked off immediately, and result should be ready for first CB occasion.

- Determine agreeable parts, Aim to agree less controversial points offline (with no CB). Identify CB points. Controversial points and/or very late points (with no time for offline decision) can CB on-line.

Intended outcome: Report

Deadline: CB W2 Thursday.

[R2-2203841](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203841.zip) Report of [AT117-e][011][IoT-NTN] User Plane (OPPO) – round 1 OPPO other Rel-16 LTE\_NBIOT\_eMTC\_NTN

[R2-2204047](file:///C:\Users\johan\OneDrive\Dokument\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2204047.zip) Report of [AT117-e][011][IoT-NTN] User Plane (OPPO) – round 2 OPPO other Rel-16 LTE\_NBIOT\_eMTC\_NTN

DISCUSSION

2b

- QC want unified solution.

7c

- HW think we do this by configuration. The UE doesn’t need to do anything

- QC think 7c is not needed.

- Chair: quite some opposition, not agreeable for now.

P10

- Huawei think we should have an offset instead, other wise we may need to expand the range unreasonably. Ericsson agrees, MTK Nokia Novamint as well

- ZTE are not ok with an offset, think it may need to be a multiple of a period. Think it is difficult to set the value for the network.

* For eMTC, use a reserved LCID for the TA Report MAC CE.
* Regarding how to extend sr-ProhibitTimer in IoT NTN, attempt configurable offset.
* Use a reserved LCID for the MAC CE corresponding K\_Offset.
* For NB-IoT, use a reserved LCID for the TA Report MAC CE.
* On logical channel priority, put the UE-specific TA report MAC CE between “MAC control element for AUL confirmation” and “MAC control element for BSR, with exception of BSR included for padding”.
* During RA procedure for RRC re-establishment procedure, the UE should trigger TA report if an indication is broadcasted by the target cell’s SI. (aligned with NR NTN)
* During RA procedure for handover, the UE should trigger TA report if the target cell indicates this in the handover command. (aligned with NR NTN)
* Other than re-establishment (TA reporting controlled by target cell’s SI) and handover procedure (TA reporting controlled by HO command), TA reporting in connected mode is not controlled by enabling/disabling indication in SI. (aligned with NR NTN)
* RAN2 to clarify the previous agreement as: Upon reception of configuration or reconfiguration of TA reporting trigger event, if UE has not reported TA to current serving cell before (during this connection), the UE triggers a TA reporting. (can further check this during the implementation in the MAC CR). (aligned with NR NTN)
* Target cell can use delta configuration for the event configuration in handover command.
* Threshold-based TA-Trigger for TA value reporting will align with NR-NTN.
* Configuration of event triggered TA report will include TA offset threshold between current TA and the last successfully reported TA (similar to NR-NTN). FFS: The value of the TA offset threshold (consider possible to align with NR-NTN values).
* Extend RLC t-Reordering timer by adding values {ms2200, ms3200}.
* Do not add values between ms200 and ms1600 for extending RLC t-Reordering timer.
* Introduce a new discardTimer value ms2000 for eMTC over NTN. FFS whether to add ms3000.

DISCUSSION 2

P4

- MTK think this is not needed. Ericsson agrees with MTK

- HW think there is no need to report if there is no data. MTK think we can use RACH

- Xiaomi think we just follow NR.

- Chair: there seems to be some things to clarify, right now P4 seems not agreeable.

* The two MAC CEs’ names are “Timing Advance Report MAC CE” and “Differential Koffset MAC CE”.
* Adopt the following field description for the “Timing Advance Report MAC CE”:

- R: Reserved bit, set to 0;

- Timing Advance: The Timing Advance field indicates the least integer number of subframes greater than or equal to the Timing Advance value (see TS 36.211 [7] section 8.1). The length of the field is 14 bits.

* Adopt the following field description for the “Differential Koffset MAC CE”:

- R: Reserved bit, set to 0;

- Differential Koffset: This field contains the differential Koffset. The length of the field is 6 bits.

[R2-2203221](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203221.zip) Report of [Pre117-e][012][IOT-NTN] Control Plane Open Issues (Huawei) Huawei, HiSilicon report Rel-17 LTE\_NBIOT\_eMTC\_NTN Late

DISCUSSION (not including P5a and P7)

- Intel think P1 is not sufficient, and NTN UE need to ignore the legacy bit.

- QC think that P1 can be introduced in the MIB for NB-IoT.

- CATT think P1 is not always needed.

- P5 Ericsson would like to have a guard timer, can likely use one that we already have. Huawei support. QC also support. Nokia object to P5 it is not needed.

- P4 CMCC wonder if t-service is in SIBXX, Huawei think yes, but it is up to UE to read it or not. Huawei think we maybe should move t-service to somewhere else.

- QC think P2 is not agreeable .. discussion.

- Chair: We should consider to move t-service to other SIB.

- Chair: We may CB to the FFS on guard timer (below) towards the end of the meeting

* A new bit, e.g. *cellBarred-NTN*, is introduced in SIB1 to bar NTN UEs from accessing a NTN cell. FFS whether to consider MIB instead of SIB1 for NB-IoT. NTN UE ignores the legacy bit.
* SIBXX is an essential SIB, i.e. the UE shall consider the cell barred if it is unable to acquire the SIB when scheduled.
* UE shall acquire the NTN specific SIB before accessing the cell, regardless of the state of UL sync validity timer.
* FFS if we Will have a guard timer to handle the case where the UE takes ‘forever’ reacquire the SIB. At timer expiry UE triggers RLF handling. (Note that it is expected that the timer will not expire in the normal case, and the UE can just come back acc to previous decision).
* All parameters needed to access the target cell are included in RRCReconfiguration message for handover.
* For simplicity, the whole SIBXX structure is included in RRCReconfiguration message for handover.
* [AT117-e][012][IoT-NTN] Control Plane (Huawei)

Scope: Based on [R2-2203221](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203221.zip) progress P5a and P7, address whether to move t-service to other SIB, address P5 from R2-22003721, Include OI 2.11 and OI 2.12 from AI 9.2.5. based on [R2-2203220](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203220.zip) progress the details, based on [R2-2203457](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203457.zip) (Ericsson), progress the details (proponent to drive the argumentation if any). Determine agreeable parts, Aim to agree offline, if needed identify CB points.

Intended outcome: Report.

Deadline: CB W2 Thursday

[R2-2203923](file:///C:\Users\johan\OneDrive\Dokument\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203923.zip) Report of [AT117-e][012][IOT-NTN] Control Plane (Huawei) Huawei discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

DISCUSSION

P1.1

- CATT think maybe the buffer doesn’t have to be flushed.

P1.2

- Nokia think this may need to be discussed in R1 or R4. UE may need to do TA adjustment.

- QC think that Nokias concern is addressed by P7.

- Ericsson think that R4 has been working on this for NR NTN, and think that if we have the guard timer in P7 it can be made to work.

- OPPO think UE need to trigger rach. Think the UE need to inform the network that it comes back. Xiaomi agrees.

- ZTE think that the network should know, somehow. Think the UE can do immediate UL transmission no need to do RACH, network can send the TA MAC CE in connected mode.

- Apple want to avoid unneccery transmissions.

- HW think RACH is not needed, TA jump can be handled and by P7.

- Nokia cannot agree to P1.2 without asking R1 or R4

P2

- Chair think we should only have FFS for thing that we really plan to look at, i.e. for which we invite papers.

- QC think RLM and measurements can be left for R4.

- xiaomi would like to have the FFS

- Chair think a cpl of companies would like a quite different mechanism, that the UE first inform network then leave, and then inform network again when entering.

- ZTE think that the more elaborate mechanism could be for next release. Nokia would be ok with next release. Ericsson agrees with ZTE and Nokia.

P7

- ZTE think that we should not reuse T310 as timer

- OPPO think we don’t need the guard timer, RLF will be triggered eventually.

- Xiaomi OPPO want to confirm that UE can still monitor DL when tuning away before agreeing to guard timer. Nokia agrees.

- LGE have sympathy for OPPO xiaomi etc.

- Ericsson think we need some protection against bad impl. QC Huawei Novamint sequans MTK also want the guard timer.

P8

- OPPO are not sure whether the band can be identified by RAN4.

- QC think RAN1 already spent time on this and they decided.

- HW think this is for eMTC as well. QC think it is only for NB-ioT

- HW think that this parameter is there for eMTC as well in the L1 parameters spreadsheet

* RAN2 assumes Upon recovery from loss of precomp synch while TAT has not expired, UE resumes UL operation, no RACH is needed.
* When the UE tunes away, it is assumed that the UE may not receive DL dedicated transmissions, actions in the DL can be left to UE implementation.
* There is some support for enhancements for long data transmissions, which could be Rel-18.
* Introduce a guard timer TXXXX for SIBXX acquisition in connected mode. At TXXX expiry, UE triggers RLF (if it can be shown in Q2 that UE will loose RLM when UE tunes away, it can be discussed to skip this timer)
* Introduce a presence indicator in addition to the 2 bit LSB EARFCN in the NB-IoT MIB (eMTC - all aspects FFS)
* Upon timer expiry (or UE tune away), UE stops all UL transmissions, flushes all HARQ buffers and maintains all UL resources.
* The UL synchronisation validity timer is maintained in RRC.
* Modified Proposal 4: SIBXX acquisition is captured in 5.2.2. UE actions upon ul-SyncValidityTimer expiry are described in a new section in 5.3.3, which will refer to 5.2.2 for SIBXX (re)acquisition
* SIBXX is included outside mobilityControlInfo, similarly to other dedicated SIB.
* t-service is moved to SIB3.
* UE shall perform neighbour cell measurement of higher priority inter-frequency or inter-RAT frequencies regardless of the remaining serving time.
* Do not capture UE behaviour w.r.t to registration update in multiple tracking areas case in TS 36.304 section 5.4.
* Unless RAN1 updates the RRC parameters spreadsheet otherwise, align the value range of the ephemeris position state vectors with the number of signalling bits.
* Unless RAN1 updates the RRC parameters spreadsheet otherwise, align the value range of the ephemeris velocity state vectors with the number of signalling bits.
* cellBarred-NTN is signalled in SIB1 for NB-IoT.

[R2-2203521](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203521.zip) [Pre117-e][013][IoT-NTN] Discontinous Coverage Open Issues Input MediaTek Inc.

DISCUSSION

P4

- QC wonder how this is captured in 304, think similar to PSM and can be very simple.

- ZTE think there may need to be some AS NAS interaction. Chair think we can assume same AS NAS interaction as for PSM mode. QC agrees with ZTE that this need to eb considered. Huawei think AS NAS interaction can be left for UE impl.

P2

- xiaomi think we don’t need dedicated RRC signalling. Think 4 is enough. CATT think the number can be increased to > 4. CATT think we can support more if we consider stationary cases.

- Gatehouse think we can consider encoding optimization to have > 4.

P3

- Intel wonder if this brings a TS change. E.g. do we need a validity timer?

- QC has the same question? E.g. Do we need an indication to indicate the character of the ephemeris data?

- Huawei think we don’t need timer or indication. Ericsson think we don’t need a validity timer or indication, but up to network impl. to ensure that mean parameters are signalled. Ericsson think P3 is ok.

- Gatehouse think that if UE has to guess how to do the prediction, based on mean or instantaneous there will be some error (may still work).

- Chair think the purpose of providing mean parameters is to improve the UE prediction, so in order for this proposal to bring benefit it is logical that the UE should know.

- Novamint think we can simply specify in the TS that the ephemeris for coverage prediction is mean values, and no signalled indication is needed.

- Apple think the UE may need more info in order to understand what mean is, e.g. averaging time. Chair think we can indeed think about this. ZTE agrees that avg time should be known by UE.

* RAN2 will use a new SIB to share the ephemeris information for Discontinuous Coverage with the UEs. Sharing the information using dedicated RRC signalling is FFS.
* While Out of Coverage in Discontinuous Coverage deployment (in Idle Mode or PSM mode) the UE is not required to perform any cell search and may deactivate its AS functions to optimize the power consumption. The remaining UE behaviour is left to UE implementation. FFS whether anything need to be specified for ASNAS interaction.
* For Discontinuous Coverage, ephemeris information of up to a maximum X satellites can be shared using the new SIB, where X is limited by the volume of information vs capacity of the SIB (X=4 is baseline). Increasing this maximum number by using dedicated RRC Signalling and by any further ephemeris optimization is FFS.
* RAN2 assumes that for Discontinuous Coverage, network can signal mean ephemeris parameters (for neighbours and potentially serving satellite for coverage prediction purpose), using the same (already introduced) ephemeris format. UE can always assume these are mean values and It is up to the network implementation to derive this mean value (and any trade-off between instantaneous and mean values if needed). FFS whether additional assumptions (like averaging time) need to be clarified, e.g. to have predictable performance.

#### 9.2.3.2 Invited tdoc input

Company input on the following Open Issues See also R2-2202053

User Plane

OI 1.10 [Company Tdocs Invited]: Whether SR can be triggered if there is no available or sufficient UL-SCH resources for the triggered TA reporting?

Control Plane

OI 2.2 [Company Tdocs invited]: Decide on Location Reporting by NAS and Coarse location report.

OI 2.3 [Company Tdocs invited]: Whether existing offset are sufficient to prioritize TN vs NTN frequencies

OI 2.8 [Company Tdocs invited]: Configuration of event-triggered TA report

OI 2.9 [Company Tdocs invited]: Signalling of multiple TACs per PLMN in eMTC and NB-IoT

Discontinuous Coverage

O1 3.5 [Company Tdocs Invited]: Decide on whether additional new parameters like satellite footprint reference point on ground, satellite coverage radius can be used?

* [AT117-e][015][IoT-NTN] Miscellaneous Issues (MediaTek)

Scope: Based on [R2-2203721](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203721.zip) (and related summarized input), Include OI 2.13 and OI 2.14 from AI 9.2.5, and progress the following:

- P3 on cell reselection priority

- Location Reporting in IoT-NTN, and kick this part off as soon as LS reply is received (e.g. for NB-IoT), and/or as soon as relevant progress is achieved for NR NTN (e.g. for eMTC).

- UE report of remaining GNSS validity duration (Chair comment: this is a R1 agreement and can thus be followed, however the R1 agreed range might not be sufficient for this reporting to be useful, suggest to discuss this).

- For Prediction of discontinus coverage: Can attempt to address the earlier defined FFS: *FFS whether additional assumptions (like averaging time) need to be clarified, e.g. to have predictable performance*.

- For Prediction of discontinus coverage: additional new parameters, like satellite footprint reference location on ground and coverage radius (condition that they shall be defined without RAN1 involvement).

- Determine agreeable parts, Aim to agree less controversial points offline (with no CB). Identify CB points.

Intended outcome: Report

Deadline: In time for first on-line CB W2 Tuesday, later CB TBD.

CLOSED

[R2-2203860](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203860.zip) [AT117-e][015][IoT-NTN] Miscellaneous Issues (MediaTek) MediaTek Inc. discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

DISCUSSION (No time to discuss P4)

P2

- OPPO think the timer may change due to HARQ retransmission

- xiaomi think that sending GNSS fix is an alternative solution and no need to follow the LS.

- QC think there could still be an issue, the network doesn’t know the validity of GNSS, should stick to R1 agreement. QC dont think HARQ is an issue, network just need to have some idea. Ericsson agree w QC, want to keep things simple and just report the remaining duration. Nokia agrees with Ericsson and QC thnk this shall be reported. ZTE agree w QC.

- Oppo think it would be easy to report the expiry time (absolute time).

- Huawei think this value is anyway informative, no normative behaviour, no requirement but ok to follow majority if kept simple. CMCC agree it need to be kept simple.

P3

- QC agree, and think epoch time is already in the R1 agreed ephemeris, and can be implicit. Should clarify ephemeris type. Why can we not just provide validity time. Gatehouse think epoch time is needed bec if implicit more information need to be handled, think that the different types of mean is for different orbits. Can agree now to have this and we can agree the details. QC think validity duration need to be specified. Gatehouse think epoch time can be optional and the default is to do implicit.

- Ericsson are concerned by multiple types, is complex for the UE. Otherwise ok.

- ZTE doesn’t want additional complexity and think RAN1 shall discuss type.

- Apple wonder if the different types uses the same formats. MTK clarifies that the formats are the same.

- Huawei think it is difficult to determine validity time from SIB scheduling, may not be updated every time, need to be explicit. Eutelsat agrees.

- Eutelsat think there are gains to be had by optimizing IEs ..

* P1: No further enhancement on cell reselection priority is needed in IoT-NTN.
* P2: RAN2 will follow the RAN1 agreement that UE will report the remaining GNSS validity duration to the network. FFS: value range (not clear if the values of RAN1 agreement can be used). FFS which message.
* P3: For Prediction of discontinuous coverage, Information about satellite id, ephemeris type (FFS if two, three of four types) and epoch time will be provided with the ephemeris information. FFS if epoch time can be optional and be implicitly derived.

[R2-2203707](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203707.zip) Summary of Invited Tdoc Input in IoT-NTN MediaTek Inc. MediaTek Inc. discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

* revised

[R2-2203721](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203721.zip) Summary of Invited Tdoc Input in IoT-NTN MediaTek Inc. MediaTek Inc. discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

[R2-2203530](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203530.zip) On GNSS validity duration reporting Ericsson, Nokia, Nokia Shanghai Bell, Turkcell, NEC, Qualcomm, ZTE

[R2-2202352](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202352.zip) Discussion on the additional new parameters for supporting discontinuous coverage for IoT over NTN Transsion Holdings discussion Rel-17

[R2-2202414](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202414.zip) Discussion on the remaining issue of IoT over NTN Spreadtrum Communications discussion Rel-17

[R2-2202458](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202458.zip) Discussion on additional parameters for Non continuous coverage Intel Corporation discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

[R2-2202549](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202549.zip) Location reporting in NAS Apple discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

[R2-2202550](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202550.zip) Support of discontinuous coverage Apple discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN R2-2201181

[R2-2202559](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202559.zip) Additional issues on the support of the discontinuous coverage Qualcomm Incorporated discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2202562](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202562.zip) Signalling of multiple TACs per PLMN in eMTC and NB-IoT Qualcomm Incorporated discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2202589](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202589.zip) Satellite assistance information and exchange for discontinuity Prediction in IoT NTN Lenovo, Motorola Mobility discussion Rel-17

[R2-2202615](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202615.zip) UP leftover issues for IoT-NTN CMCC discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

[R2-2202621](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202621.zip) Discussion on open issues for support of Non continuous coverage CMCC discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

[R2-2202729](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202729.zip) Remaining Issues of CP Impact of IoT over NTN CMCC discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2202746](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202746.zip) Remaining issues of user plane in IoT NTN ZTE Corporation, Sanechips discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN-Core

[R2-2202747](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202747.zip) Remaining issues of control plane in IoT NTN ZTE Corporation, Sanechips discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN-Core

[R2-2202748](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202748.zip) Remaining issues of discontinuous coverage in IoT NTN ZTE Corporation, Sanechips discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN-Core

[R2-2202749](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202749.zip) Remaining issues of UE capabilities in IoT NTN ZTE Corporation, Sanechips discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN-Core

[R2-2202931](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202931.zip) Discussion on discontinuous coverage Xiaomi discussion

[R2-2203000](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203000.zip) Discussion on UP open issues in IoT NTN OPPO discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

[R2-2203001](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203001.zip) Discussion on the open issues of discontinuous coverage for IoT over NTN OPPO discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

[R2-2203002](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203002.zip) Discussion on Control Plane open issues for IoT NTN OPPO discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

[R2-2203052](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203052.zip) On remaining control plane issues for IoT-NTN Nokia Solutions & Networks (I) discussion

[R2-2203080](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203080.zip) Further Discussion on the Open Issues of IoT-NTN Control Plane CATT discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

[R2-2203081](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203081.zip) Open Issue on UP and Discontinous Coverage CATT discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

[R2-2203192](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203192.zip) Issues related to IOT NTN RRC running CR Xiaomi discussion Rel-17

[R2-2203193](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203193.zip) Remaining issues of IOT NTN RRC Xiaomi discussion Rel-17

[R2-2203222](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203222.zip) OI 2.9: Signalling of multiple TACs per PLMN in eMTC and NB-IoT Huawei, HiSilicon discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

[R2-2203223](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203223.zip) OI 3.5: Discussion on non continuous coverage Huawei, HiSilicon discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

[R2-2203258](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203258.zip) On IoT NTN open issues for Discontinuous Coverage and User plane Nokia, Nokia Shanghai Bell discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

[R2-2203293](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203293.zip) (O1 3.5) Parameters for coverage gap prediction and Idle mode behaviour Interdigital, Inc. discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

[R2-2203453](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203453.zip) Control plane and discontinuous coverage aspects of IoT NTN Ericsson discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

[R2-2203483](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203483.zip) User plane aspects of NB-IoT and LTE-M in NTNs Ericsson discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

* [015] 32 tdocs Noted

### 9.2.4 UE capabilities

Includes invited tdocs for identified Open issues

#### 9.2.4.1 R2 Features and General

Open Issues See also R2-2202053

UE Capabilities

OI 4.1 [Company Tdocs Invited]: UE capability for supporting soft-switching procedure

OI 4.2 [Company Tdocs Invited]: UE capability for supporting PUR Timer modifications

OI 4.3 [Company Tdocs Invited]: Reuse of the existing CHO capability indication for IoT-NTN CHO

OI 4.4 [Company Tdocs Invited]: Whether Capability Indication of existing IoT-Features until Rel-16 are reused in NTN, or to what extent they need to be duplicated to allow for different Interoperability Test (IOT) Status

* [AT117-e][064][IoT-NTN] UE capabilites (Nokia)

Scope: a) review the CR (it is new) b) based on Input to 9.2.4, address the open issues. Determine agreeable parts, identify discussion points and pave the way for efficient on-line CB. For OI4.4 focus for now on the need, rather than solutions, e.g. attempt to identify which capabilities should be indicated per deployment option, if any.

Intended outcome: Report

Deadline: In time for on-line CB W2 Tuesday

CLOSED

[R2-2203983](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203983.zip) Report on[AT117-e][064][IoT-NTN] UE capabilites (Nokia) Nokia, Nokia Shanghai Bell discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

DISCUSSION

P1 P2 P3

- QC think we need to indicate separately PUR for NTN, including timer modification.

- ZTE has similar view as QC, but think that for some case the PUR can be supported without timer modification. QC think the timer mod is mandatory for NTN, PUR is not for LEO in Rel-17.

- Ericsson think that PUR can in principle be supported also for LEO. Novamint agrees with Ericsson.

- QC would like to clarify that P3: CHO is for NTN only not for TN.

P4 4A P5

- Huawei think different containers will not be there in the core network.

- Huawei think there is no need to separate US caps for NTN and TN, there could be some exception.

- QC think there is confusion on implemented, supported, tested feature.

- VDF think that playing w Network container may come with complexity.

Chair: Still not clear, for which features we’d need separate UE cap signalling for TN and NTN (for IOT purpose, and for difference in impl purpose)

**Initial agreements, considering diff/sim in impl. (not considering IODT for now)**

* P1: Support for reception of multiple tracking areas in system information and updating the TA list to NAS is considered as mandatory capability for NTN access.
* P2: Timer modification for PUR operation for NTN is optional UE capability (assume with separate UE capability indication)
* P3: CHO capability for eMTC-NTN is indicated by the existing LTE CHO capability indication.

OI4.4 is still Open

[R2-2203224](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203224.zip) OI 4.1 and OI 4.2: UE capabilities open issues Huawei, HiSilicon discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

[R2-2203225](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203225.zip) OI 4.4: TN – NTN differentiation Huawei, HiSilicon discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

[R2-2202415](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202415.zip) Remaining FFSs on UE Capabilities Spreadtrum Communications discussion Rel-17

[R2-2202561](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202561.zip) Open issues on UE capabilities for NB-IoT and eMTC Qualcomm Incorporated discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2202724](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202724.zip) Remaining Issues on IoT NTN UE Capabilities CMCC discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2202742](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202742.zip) Further analysis on remaining open issues for IoT-NTN Capabilities Nokia, Nokia Shanghai Bells discussion Rel-17

[R2-2202932](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202932.zip) Discussion on UE capabilities Xiaomi discussion

[R2-2203003](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203003.zip) Discussion on IoT NTN UE capabilities OPPO discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

[R2-2203237](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203237.zip) Remaining open issues of IoT NTN UE capabilities NEC Telecom MODUS Ltd. discussion

[R2-2203454](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203454.zip) On IoT NTN capabilities Ericsson discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

* [064] 19 tdocs Noted

#### 9.2.4.2 R1 and R4 Features

CR Rapporteur to make initial proposals

### 9.2.5 Other

Issues not covered elsewhere. See also R2-2202053

OI 2.11 [Other] Signalling range of positionX, positionY, positionZ

OI 2.12 [Other] Signalling range and step size of velocityVX, velocityVY, velocityVZ

OI 2.13 [Other] UE location reporting in eMTC

OI 2.14 [Other] UE location reporting in NB-IoT

[R2-2202560](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202560.zip) UE state mismatch upon expiry of GNSS validity timer Qualcomm Incorporated discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2203259](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203259.zip) On IoT NTN Other open issues Nokia, Nokia Shanghai Bell discussion Rel-17 LTE\_NBIOT\_eMTC\_NTN

## 9.3 EUTRA R17 Other

Time budget: 0 TU

Tdoc Limitation: No limitation but new topics may be deprioritized depending on available time.

This agenda item may use a summary document (decision made based on submitted contributions).

Including RRC CRs based on L1 parameters received from RAN1 for all Rel-17 LTE WIs not covered by other AIs

Including final CRs for LTE TEI17 proposals that have been agreed in principle earlier.

[R2-2202212](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202212.zip) Introduction of event-based trigger for LTE MDT logging [LTE-Event-MDT] KDDI Corporation, CMCC, Telecom Italia, Samsung, Ericsson, China Unicom, Huawei, HiSilicon, Qualcomm Inc. CR Rel-17 37.320 16.7.0 0113 - B TEI17

[R2-2202213](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202213.zip) Introduction of event-based trigger for LTE MDT logging [LTE-Event-MDT] KDDI Corporation, CMCC, Telecom Italia, Samsung, Ericsson, China Unicom, Huawei, HiSilicon, Qualcomm Inc. CR Rel-17 36.331 16.7.0 4752 - B TEI17

[R2-2202237](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202237.zip) Introduction of new bands and bandwidth allocation for LTE-based 5G terrestrial broadcast Qualcomm Incorporated CR Rel-17 36.331 16.7.0 4750 1 B LTE\_terr\_bcast\_bands\_part1-Core R2-2200209

[R2-2202238](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202238.zip) Introduction of new bands and bandwidth allocation for LTE-based 5G terrestrial broadcast Qualcomm Incorporated CR Rel-17 36.306 16.7.0 1836 - B LTE\_terr\_bcast\_bands\_part1-Core

[R2-2202290](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202290.zip) On introducing height information reporting in MDT reports [LTE-Height-MDT] KDDI Corporation, Ericsson CR Rel-17 36.331 16.7.0 4756 - B TEI17 R2-2200368

[R2-2202291](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202291.zip) On introducing height information reporting in MDT reports [LTE-Height-MDT] KDDI Corporation, Ericsson CR Rel-17 37.320 16.7.0 0114 - B TEI17 R2-2200370

[R2-2202292](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202292.zip) On introducing height information reporting in MDT reports [LTE-Height-MDT] KDDI Corporation, Ericsson CR Rel-17 36.306 16.7.0 1838 - B TEI17 R2-2200371

R2-2202503 Addition of NR-U RSSI/CO measurement UE capability (TS36.331) Apple, xiaomi, vivo, Lenovo, Motorola Mobility, Ericsson, Qualcomm Incorporated CR Rel-17 36.331 16.7.0 4761 - F NR\_unlic-Core, TEI17 Withdrawn

R2-2202504 Addition of NR-U RSSI/CO measurement UE capability (TS36.306) Apple, xiaomi, vivo, Lenovo, Motorola Mobility, Ericsson, Qualcomm Incorporated CR Rel-17 36.306 16.7.0 1840 - F NR\_unlic-Core, TEI17 Withdrawn

[R2-2202841](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202841.zip) Introduction of event-based trigger for LTE MDT logging [LTE-Event-MDT] Huawei, HiSilicon, Qualcomm Inc., KDDI Corporation CR Rel-17 36.304 16.6.0 0834 1 B TEI17 R2-2110643

[R2-2202842](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202842.zip) Introduction of event-based trigger for LTE MDT logging [LTE-Event-MDT] Huawei, HiSilicon, Qualcomm Inc., KDDI Corporation CR Rel-17 36.306 16.7.0 1830 1 B TEI17 R2-2110644

[R2-2203161](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203161.zip) Addition of NR-U RSSI/CO measurement UE capability Apple, xiaomi, vivo, Lenovo, Motorola Mobility, Ericsson, Qualcomm Incorporated CR Rel-17 36.331 16.7.0 4729 3 F NR\_unlic-Core, TEI17 R2-2111319

[R2-2203162](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203162.zip) Addition of NR-U RSSI/CO measurement UE capability Apple, xiaomi, vivo CR Rel-17 36.306 16.7.0 1827 3 F NR\_unlic-Core, TEI17 R2-2111320

## 9.4 User Plane Integrity Protection support for EPC connected architectures

(UPIP\_EN-DC\_UE; leading WG: RAN3; REL-17; WID: RP‑213669)

Time budget: 0.5 TU

Tdoc Limitation: 2 tdocs

Including discussion on SA3 LS R2-2200153

Including configuration and capability aspects of allowing full rate UPIP for EN-DC UEs connected to EPC

[R2-2202145](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202145.zip) Reply LS on LTE User Plane Integrity Protection (R3-221473; contact: Vodafone) RAN3 LS in Rel-17 To:SA3, SA2 Cc:CT4, CT1, RAN2

[R2-2202717](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202717.zip) Introducing support of UP IP for EPC connected architectures using NR PDCP Huawei, HiSilicon, Vodafone, Ericsson CR Rel-17 36.331 16.7.0 4763 - B UPIP\_SEC\_LTE

[R2-2202718](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202718.zip) Introducing support of UP IP for EPC connected architectures using NR PDCP Huawei, HiSilicon, Vodafone, Ericsson CR Rel-17 38.331 16.7.0 2904 - B UPIP\_SEC\_LTE

[R2-2202719](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202719.zip) Introducing support of UP IP for EPC connected architectures using NR PDCP Huawei, HiSilicon, Vodafone, Ericsson CR Rel-17 36.300 16.7.0 1353 - B UPIP\_SEC\_LTE

[R2-2202720](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202720.zip) Introducing support of UP IP for EPC connected architectures using NR PDCP Huawei, HiSilicon, Vodafone, Ericsson CR Rel-17 37.340 16.8.0 0294 - B UPIP\_SEC\_LTE

[R2-2202721](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202721.zip) Introducing support of UP IP for EPC connected architectures using NR PDCP Huawei, HiSilicon, Vodafone, Ericsson CR Rel-17 38.323 16.6.0 0085 - B UPIP\_SEC\_LTE

[R2-2202722](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202722.zip) Discussion on LTE User Plane Integrity Protection (SA3 LS) Huawei, HiSilicon discussion Rel-17 UPIP\_SEC\_LTE

[R2-2203369](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203369.zip) draft Reply LS on LTE User Plane Integrity Protection Vodafone LS out Rel-17 To:SA3 Cc:RAN3, SA2

## 9.5 NR and EUTRA Inclusive language

Time budget: N/A

RAN coordinator for inclusive language is Gino Masini (Ericsson).

CRs were endorsed/agreed-in-principle at R2#112-e. Final approval of CRs is expected in RAN#95e, so affected RAN2 specifications rapporteurs are requested to submit the endorsed CRs (updated to latest TS versions) for approval in this meeting.

[R2-2202217](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202217.zip) Inclusive Language Review for TS 38.300 Nokia (Rapporteur) CR Rel-17 38.300 16.8.0 0401 - D TEI17

[R2-2202227](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202227.zip) Inclusive Language Review for TS 36.306 Motorola Mobility (Rapporteur) CR Rel-17 36.306 16.7.0 1835 - D TEI17

[R2-2202666](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202666.zip) Inclusive Language Review for TS 38.306 Intel Corporation CR Rel-17 38.306 16.7.0 0686 - D TEI17

[R2-2202687](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202687.zip) Inclusive language in TS38.304 Qualcomm Incorporated (Rapporteur) CR Rel-16 38.304 16.7.0 0204 1 D TEI17 R2-2102295

R2-2202933 Inclusive language review for TS 36.331 Samsung CR Rel-17 36.331 16.7.0 4767 - D TEI17 Withdrawn

[R2-2202934](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2202934.zip) Inclusive language in TS36.331 Samsung (Rapporteur) CR Rel-17 36.331 16.7.0 4600 1 D TEI17 R2-2101988

R2-2203189 Inclusive Language Review for TS36.304 Nokia, Nokia Shanghai Bell CR Rel-17 36.304 16.6.0 0841 - D TEI17 Withdrawn

[R2-2203228](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203228.zip) Inclusive language in 36.304 Nokia, Nokia Shanghai Bell CR Rel-17 36.304 16.6.0 0822 2 D TEI17 R2-2101990 Late

[R2-2203270](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203270.zip) Inclusive Language Review for TS 36.300 Nokia (rapporteur) CR Rel-17 36.300 16.7.0 1333 2 D TEI17 R2-2101989

[R2-2203399](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203399.zip) Inclusive language in 37.320 Nokia (Rapporteur) CR Rel-17 37.320 16.7.0 0104 1 D TEI17 R2-2101991

[R2-2203406](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_117-e\Docs\R2-2203406.zip) Inclusive language in TS 38.331 Ericsson CR Rel-17 38.331 16.7.0 2459 1 D TEI17 R2-2101987