**3GPP TSG-RAN WG2 Meeting #110 electronic R2-19xxxxx**

**Online, June 1 – June 12 2020**

**Source: RAN2 Chairman (Mediatek)**

**Title: Chairman Notes**

# Main session email list

This sub-clause lists the email discussions of the main session, Email discussions xyz range: [000]-[099]. Main Session Comprises normally Agenda Items: 1, 2, 3, 5 NR R15 except positioning, 6.0 R16 Organizational, 6.1 IAB, 6.7 IIOT, 6.10 DCCA, 6.19 Other, 6.20 TEI16 except positioning, 6.22 URLLC, 8 Session Reports, meeting conclusion.

* [AT110-e][000] Organizational (Chairman)

Scope: Organizational for Main R2 110e meeting and Johan’s session, notifications about the meeting, approval of items under AI 1 and 2, 8 and treatment of things not handled elsewhere

Deadlines: announced by email, different for different items

* [NR Rel-16] 38331 \* (Ericsson)

Scope: NR ASN.1 review thread by RRC Rapporteur (multi-meeting scope). This thread is mainly used for management of the ASN.1 review file, update of RIL information, and flagging of RIL issues.

* [AT110-e][001][NR15] Corrections 38300 (vivo)

Scope: Treat R2-2004442, R2-2004443, R2-2004846, R2-2004847, R2-2004848, R2-2004849, R2-2004850, R2-2004851 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: Others: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC.

* [AT110-e][002][NR15] Corrections 37340 (ZTE)

Scope: Treat R2-2005163 (IPA), R2-2005164 (IPA), R2-2005230, R2-2005231, R2-2005356, R2-2005357 (proponents are responsible to explain and drive)

Part 1: Agree In-principe agreed (IPA) CRs. Others: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: Others: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC.

* [AT110-e][003][NR15] Misc RRC Corrections (Ericsson)

Scope: Treat R2-2005000 (IPA), R2-2005001 (IPA), R2-2005641 (IPA), R2-2005642 (IPA), R2-2005643 (IPA), R2-2005644 (IPA), R2-2004853 (IPA), R2-2004854 (IPA), R2-2005233 (IPA), R2-2005234 (IPA), R2-2005322, R2-2004912, R2-2004913, R2-2005165, R2-2005166 (proponents are responsible to explain and drive)

Part 1: Agree In-principe agreed (IPA) CRs. Others: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: Others: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][004][NR15] L1 Parameters (Qualcomm)

Scope: Treat R2-2004468, R2-2004469, R2-2005072, R2-2005073, R2-2005110, R2-2005111, R2-2004773, R2-2004774 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][005][NR15] L2 Parameters (ZTE)

Scope: Treat R2-2004564, R2-2004565, R2-2004566, R2-2004567, R2-2004568, R2-2004770, R2-2004771, (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][006][NR15] Release of Configuration (Nokia)

Scope: Treat R2-2004903, R2-2004904, R2-2004905, R2-2005009, R2-2005002, R2-2005003 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][007][NR15] DC Configuration (Apple)

Scope: Treat R2-2005531, R2-2005532, R2-2005533, R2-2005534, R2-2005634, R2-2005635, R2-2004488, R2-2004489 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][008][NR15] Mobility (Huawei)

Scope: Treat R2-2004768, R2-2004769, R2-2005270, R2-2005271, R2-2005703, R2-2005704, R2-2005636, R2-2005637 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][009][NR15] Processing Time and Security (Qualcomm)

Scope: Treat R2-2004448, R2-2004449, R2-2004531, R2-2004532, R2-2004533, R2-2004534, R2-2005636, R2-2005637 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][010][NR15] Measurements and System Information (Huawei)

Scope: Treat R2-2004363 R2-2005419, R2-2005420, R2-2005421, R2-2005422, R2-2005392, (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][011][NR15] Inter-Node RRC (Huawei)

Scope: Treat R2-2004337, R2-2005182, R2-2005235, R2-2005236, R2-2005237, R2-2005167, R2-2005168, R2-2005574, R2-2005576, (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][012][NR15] LTE changes related to NR (Nokia)

Scope: Treat all documents under 5.4.2, 5.4.2.0, 5.4.2.1 (proponents are responsible to explain and drive)

Part 1: Agree In-principle agreed CRs, for others: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For others, for agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][013][NR15] User Plane Corrections (Samsung)

Scope: Treat R2-2004423, R2-2004424, R2-2004940, R2-2004942, R2-2005555, R2-2005557. R2-2005471, and possibly in part 2 R2-2005556, R2-2005558, R2-2005559, R2-2005560, R2-2005561, R2-2005472 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: Others: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC.

* [AT110-e][014][NR15] UE Cap IPA and email disc last meeting (Nokia)

Scope: Treat all IPA CRs under 5.4.3.0, and from 5.4.3.1: R2-2006021, R2-2006022, R2-2005411, R2-2005412, R2-2005413, R2-2004478, R2-2004479

Part 1: Agree In-principle agreed CRs, for others: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For others, for agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][015][NR15] UE cap FR2 Fallback (Apple)

Scope: Progress CRs, based on R2-2004754 and R2-2004754

Part 1: Can kick off email discussion to gather more comments on the CRs, awaiting on-line treatment.

Part 2: Technically Endorsed CRs for RP. Deadline: June 10, 0700 UTC

* [AT110-e][016][NR15] UE cap xDD FRx differentiation (Qualcomm)

Part 1: May kick off email discussion to gather more comments, if any, awaiting on-line treatment.

Part 2: Agreed CRs. Approved LS Deadline: June 10, 0700 UTC

* [AT110-e][017][NR15] UE cap Simultaneous SRS antenna and carrier switching (Qualcomm)

Scope: Treat R2-2004434, R2-2004435, R2-2005360, R2-2005361, R2-2004971, R2-2005579, R2-2005580 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][017A][NR15] UE cap Number of bearers (Qualcomm)

Scope: Treat R2-2004441, R2-2005358, R2-2005359, R2-2004432, R2-2004433, R2-2005004, R2-2005580 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][018][NR15] UE cap NE-DC and NGEN-DC (OPPO)

Scope: Treat R2-2004313, R2-2004470, R2-2004472, R2-2004471, R2-2004473, R2-2004821, R2-2004822, R2-2004396, R2-2004397, R2-2004398, R2-2004399, R2-2004400, R2-2004823, R2-2004405 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][019][NR15] UE cap CGI Reporting (vivo)

Scope: Treat R2-2005618, R2-2005619, R2-2005620, R2-2005621, R2-2005622, R2-2004994, R2-2004995, R2-2004996 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][020][NR15] UE cap IMS Voice (Google)

Scope: Treat R2-2005494, R2-2005499, R2-2005535, R2-2005540, R2-2005458, R2-2005459 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][021][NR15] UE cap Miscellaneous I (Qualcomm)

Scope: Treat R2-2005630, R2-2005631, R2-2005632, R2-2005633, R2-2004326, R2-2005577, R2-2005578, R2-2004436, R2-2004437 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][022][NR15] UE cap Miscellaneous II (Samsung)

Scope: Treat R2-2004831, R2-2004458, R2-2004459, R2-2005397, R2-2005398 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][023][NR15] UE cap Miscellaneous III (ZTE)

Scope: Treat R2-2004560, R2-2004561, R2-2004972, R2-2004969, R2-2004970, R2-2004844, R2-2004845 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][024][NR15] Idle Inactive Mode (Apple)

Scope: Treat all documents under 5.4.4, 5.4.4.0, 5.4.4.1 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][025][TEI16 Other] In-principle Agreed CRs (Mediatek)

Scope: Treat all documents under 6.19.0, and 6.20.1.0 (proponents are responsible to explain and drive)

Expected Outcome: Agree In-principle agreed CRs, Deadline: June 5, 0700 UTC.

* [AT110-e][026][Other] UL Tx switching (China Telecom)

Scope: Treat R2-2004375, R2-2004328, R2-2005219, R2-2004756, R2-2005220, R2-2005222 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes. Deadline: June 4, 0700 UTC. (Remaining parts if needed can be revisited on-line).

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][027][Other] Mandatory Gap Patterns (ZTE)

Scope: Treat R2-2004378, R2-2004474, R2-2004475, R2-2004476, R2-2004477, R2-2005425, R2-2005426, R2-2005427, R2-2005428 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes. Deadline: June 4, 0700 UTC. (Remaining parts if needed can be revisited on-line).

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][028][Other] Inter-Freq measurments without Gaps (Huawei)

Scope: Treat R2-2004367, R2-2005445, R2-2005446, R2-2005447, R2-2004477 (R2-2006017), R2-2004824, R2-2004825, R2-2004757, R2-2004726, R2-2005424 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes. Deadline: June 4, 0700 UTC. (Remaining parts if needed can be revisited on-line).

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][029][Other] HST (CMCC)

Scope: Treat R2-2004368, R2-2004372, R2-2005440, R2-2005441, R2-2005442, R2-2005443, R2-2005444, R2-2005712, R2-2005449 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes. Deadline: June 4, 0700 UTC. (Remaining parts if needed can be revisited on-line).

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][030][Other] FR2 MPE (Interdigital)

Scope: Treat discussion papers R2-2004341, R2-2004906, R2-2004932, R2-2005126, R2-2005138, R2-2004386, R2-2004650, R2-2004778 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes. If needed after a first round of email discussion, can be revisited on-line. Rapporteur can set additional check-points.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: EOM

* [AT110-e][031][Other] BCS with asymmetric channel bandwidths (Huawei)

Scope: Treat R2-2005400, once LS from RAN4 is available.

Expected Outcome: Agreed CR.

* [AT110-e][032][Other] EN\_DC power class expansion (T-Mobile USA)

Scope: Treat R2-2005209.

Expected Outcome: Agreed CR.

Deadline: June 10 0700 UTC.

* [AT110-e][033][Other] Overheating (Huawei)

Scope: Treat R2-2005401, R2-2005404, R2-2005402, R2-2005403 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][034][Other] EN-DC Cell Reselection (CMCC)

Scope: Treat R2-2005436, R2-2005600, R2-2005599, R2-2005598 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][070][Other] Under-reporting CSI-RS (NTT DOCOMO)

Scope: Treat R2-2004983, R2-2004984, R2-2004985 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][035][TEI16] New Proposals (R2 Chairman)

Scope: Treat R2-2005159, R2-2005175, R2-2004535, R2-2004536, R2-2004537, R2-2004538, R2-2004539, R2-2005121, R2-2005184, R2-2004618, R2-2004863, R2-2005662, R2-2004601, R2-2004512, R2-2004514, R2-2004516, R2-2004519 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes. Deadline: June 5, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs (may split the email discussion). Deadline: EOM

* [AT110-e][036][TEI16] TEI16 corrections (OPPO)

Scope: Treat R2-2004526, R2-2004527, R2-2005614, R2-2004388, R2-2004438, R2-2005429, R2-2004393 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][037][TEI16] Secondary DRX (Ericsson)

Scope: Treat R2-2004325, R2-2004364, R2-2005729 and Aspects that do not overlap with email discussion of: R2-2004856, R2-2004553, R2-2004640, R2-2004786 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes, and make agreements as far as possible. Deadline: June 4, 0700 UTC. Possibly if needed can be revisited on-line.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

* [AT110-e][038][eURLLC] UE capabilities CRs (Huawei)

Intended outcome: Endorsed Draft CRs 38306 38331 implementing R2 capabilites (with high quality cover sheet, changemarks author = WI code)

Deadline: June 7th, 0700 UTC

CLOSED

* [AT110-e][039][eURLLC] RRC (Huawei)

Scope: Treat All Relevant Review Issues (RIL) and tdocs under 6.22.2

Intended outcome: Agreed 38331 CR Building on the baseline

Deadline: June 11, 0700 UTC

* [AT110-e][040][eURLLC] MAC (Huawei)

Scope: TBD if R2-2004965 is in scope (it will be treated with IIOT).

Intended outcome: Agreed 38321 CR Building on the baseline

Deadline: June 11, 0700 UTC

* [AT110-e][041][IAB] Stage-2 (Qualcomm, Huawei)

Scope: Treat papers under 6.1.2, issues, corrections etc, Capture meeting agreements impact to TS. Can take into account LSes etc, Endorsed CRs from last meeting is the baseline for further updates, if any are agreeable,

Intended outcome: Agreed CRs 38300 36300 (QC), 37340 (Huawei)

Deadline: June 11, 0700 UTC

* [AT110-e][042][IAB] BAP (Huawei)

Scope: Treat R2-2005584, R2-2005585, issues, corrections etc, Capture meeting agreements impact to TS. Can also take into account LSes / progress in other groups etc, Treat parts that don’t overlap with input email discussion of R2-2004593 R2-2005665 R2-2005666 R2-2005667. Endorsed CR from last meeting is the baseline for further updates,

Intended outcome: Agreed CRs 38340

Deadline: June 11, 0700 UTC

* [AT110-e][043][IAB] User Plane (Samsung)

Scope: Treat R2-2004966, R2-2004948, issues, corrections and relevant parts of other papers, Capture meeting agreements impact to TS. Can also take into account LSes / progress in other groups etc, Endorsed CR from last meeting is the baseline for further updates,

Intended outcome: Agreed CRs 38321

Deadline: June 11, 0700 UTC

* [AT110-e][044][IAB] RRC CR (Ericsson)

Scope: **FIRST** Treat R2-2004607 and make agreements on everything as far as possible. Treat all Relevant RIL issues from ASN.1 review. Update RRC CR(s) to implement the solutions. When they are ready, take into account all IAB agreements and update further the RRC CR(s).

Part 1: Agreements relevant to Stage-3 from R2-2004607 and RIL issues.

Part 2: Agreed CR 38331 (Ericsson) (and 36331 if there is impact) for RP. Deadline: June 11, 0700 UTC

* [AT110-e][045][IAB] Partiuclar issues I Misc (ZTE)

Scope: Address open issues related to F1-C/F1AP transport and configuration including R2-2004338, address also R2-2004353 (if any impact at all), and address other non-IP or UAC issues not fully covered in [044], e.g. Support for RRC\_Inactive

Intended outcome: Report with functional Agreements (potentially also TPs).

Deadline: June 5, 0700 UTC

* [AT110-e][046][IAB] Partiuclar issues II IP Address handling (Samsung)

Scope: Address open issues related to IP address handling in a IAB Node, mainly RRC, can also discuss the Role of BAP if any such open issue, address R2-2004361,

Intended outcome: Report with functional Agreements (potentially also TPs).

Deadline: June 5, 0700 UTC

* [AT110-e][047][IAB] Partiuclar issues III UAC (LG)

Scope: Address issues related to UAC and cause values, treat R2-2005992, R2-2005653,

Intended outcome: Report with functional Agreements (potentially also TPs).

Deadline: June 5, 0700 UTC

* [AT110-e][048][IAB] UE capabilities (Nokia)

Scope: Treat at least R2-2004684 and possibly other relevant input that does not overlap with the input email discussion, make agreements as far as possible.

Part 1: Agreements

Part 2: Agreed/Endorsed CR 306 331, Deadline: EOM

* [AT110-e][049][IAB] Other (Huawei)

Scope: Treat papers under 6.1.7, identify agreeable items, make agreements as far as possible.

Part 1: Agreements

Part 2: Agreed CRs 304, 322, (RRC impacts should be captured in the main IAB RRC CR).

Deadline: EOM

* [AT110-e][050][DCCA] MAC updates (OPPO)

Scope: Treat documents under 6.10.3, determine agreeable parts and and make agreements. Implement meeting agreements in updated CRs.

Part 1: Agreements (rapporteur sets the deadline)

Part 2: Updated Agreed CR 38321

Deadline: June 11 0700 UTC

* [AT110-e][051\_A][DCCA] RRC 36331 38331 (Ericsson)

Scope: Adress relevant Review Issues (RILs), with or without tdocs, determine agreeable parts and and make agreements. Implement RIL solutions and DCCA Meeting agreements in updated CRs.

Part 1: Agreements (rapporteur sets the deadline)

Part 2: Agreed CRs 38331 36331 Deadline: EOM

* [AT110-e][052][DCCA] Fast Scell Activation (OPPO)

Scope: Address Open issues

Expected Outcome: Agreements

Deadline: June 5 0700 UTC

* [AT110-e][053][IIOT] Accurate Reference Time (NTT DOCOMO)

Scope: Address the following FFSes: FFS 1 whether the UE is allowed to send the same interest message again. FFS 2 the need for a prohibit timer T346. Can also address other proposals provided in the documents under 6.7.2.1 if there is interest (proponents will need to push and explain).

Intended outcome: Agreements

Deadline: June 5, 0700 UTC

* [AT110-e][054][IIOT] RRC (Ericsson)

Scope: Treat at least email discussion summary in R2-2004954 and the resulting updated CR. Address all other relevant Review issues (RILs), with or without tdocs. Implement meeting agreements in the CR.

Part 1: Agreements (rapporteur to announce deadline)

Part 2: Agreed CRs 38331 (36331 if applicable)

Deadline: June 11, 0700 UTC

* [AT110-e][055][IIOT] MAC (Samsung)

Scope 1: Treat the email discussion summary in R2-2005645, make agreements as far as possible (difficult discussion can be brought on-line instead, for desicions). Address other relevant issues under 6.7.3.1 not overlapping with the email discussion and/or previous agreements, if any. Address also inter-UE-prioritization below.

Scope 2: Implement meeting agreements in the CR.

Part 1: Agreements (rapporteur to announce deadline)

Part 2: Agreed CRs 38321. Deadline: EOM

* [AT110-e][056][IIOT] Scheduling Enhnancments (vivo)

Scope: Treat R2-2004737, R2-2004677, R2-2005338. Note that the proposal in R2-2004677 was attempted last meeting, failed due to nonsufficient support. Now there seems to be additional supporter so we can check if people has changed their mind (no need to re-do a lot of the discussion)

Wanted Outcome: Agreements

Deadline: June 5 0700 UTC

* [AT110-e][045][IIOT] PDCP Duplication and PDCP CRs (LG)

Scope: Treat R2-2005723, determine agreeable parts and and make agreements. Implement meeting agreements in updated CRs.

Part 1: Agreements (rapporteur sets the deadline)

Part 2: Agreed CRs 38323 36323

Deadline: June 11 0700 UTC

* [AT110-e][046] or [058][IIOT] EHC (Intel)

Scope: Treat R2-2005589, determine agreeable parts and and make agreements.

Wanted Outcome: Agreements

Deadline: June 5 0700 UTC

* [AT110-e][059][IIOT] Stage-2 CRs (Nokia, Huawei)

Scope: Updated Stage-2 CR. Capture meeting agreements, corrections.

Wanted Outcome: Agreed CRs 37340 (Huawei) 36300 38300 (Nokia)

Deadline: June 11 0700 UTC

* [AT110-e][048] [060][IIOT] UE capabilities (Nokia)

Scope: Treat R2-2004681, determine agreeable parts and and make agreements. Implement meeting agreements in updated CRs.

Part 1: Agreements (rapporteur sets the deadline)

Part 2: Endorsed CRs 38306 38331 36306 36331 (For merge, good Q cover sheet etc)

Deadline: June 11 0700 UTC

* [AT110-e][061][NR16] Stage-2 (Nokia)

Scope: Treat R2-2004302, R2-2005998. General updates for R16 and corrections

Wanted Outcome: Agreed CR

Deadline: June 11, 0700 UTC

* [AT110-e][062][NR16] MAC updates (Ericsson)

Scope: Treat R2-2005328, R2-2005501, R2-2005502, R2-2005562. Multi-WI MAC corrections.

Wanted Outcome: Agreed CR

Deadline: June 11, 0700 UTC

* [AT110-e][064][NR16] NR RRC 1 (Ericsson)

Scope: The Main NR RRC Email Thread for R2 110-e. Review and update of the rapporteur ASN.1 corrections CR

Scope: On initiative by Rapporteur, Treatment of tdocs, discussion and decision on specific RIL issues, focus on Class 2 issues.

Wanted outcome: Agreements on Class 2 and general matters. Deadlines can be set if needed by the rapporteur. Agreements can be declared also wo deadline (if proposal is unchallenged and no comment for 24h).

Wanted outcome: Agreed Rapporteur ASN.1 corrections CR. Deadline: EOM (expect email approval)

* [AT110-e][065][NR16] NR ASN1 1 (Huawei)

Scope: R2-2005260 [38.331][H232] Extension to the contents of items of a list using ToAddMostList in absence of extension markers, R2-2004709 Extension of SearchSpace IE [Z106][I657][I658][I659], [H232][I657][658][I659] SearchSpace: contents, no markers, [I648] resourceToAddModList PUCCH-Resource: contents, no markers, [I656] ControlResourceSet : contents and size, markers, [I649][E266] spatialRelationInfo, PUCCH-SpatialRelationInfo vs PUCCH-SpatialRelationInfoList, [E132] pathlossReferenceRSToAddModList in PUSCH-PowerControl-v16xy, R2-2005626 [H241] Correction to PDCCH configuration Huawei, HiSilicon, R2-2005627 [H242] Correction to DCI formats in SearchSpace Huawei, HiSilicon

Deadline: Wed June 10 0500 UTC

* [AT110-e][066][NR16] NR ASN1 2 (Intel)

Scope: R2-2005258 [38.331][H230] Extension of a single Need M item to a list of this item, List not ToAddMod [S655] [H005], [R2-2005259](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005259.zip) [38.331][H231] Extending the number of entries of a list not using ToAddMod list, Mechanism to release Rel-16 field I633, I805, I803, I840, H248, I806, I804, I815, I807, I808, I820, I809, I810, I811, I812, I816, I813, I814, I818, S496, R2-2005265 [38.331][H248] Fieds that cannot be released, R2-2005263 [38.331][H246] Usage of presence conditions for SetupRelease structures R2-2005264 [38.331][H247] Missing need codes for absence in presence

Deadline: Wed June 10 0500 UTC

* [AT110-e][067][NR16] NR ASN1 3 (Ericsson)

Scope: Default value I631 E252, Misc Need codes Conditions I630 I655 I662 I663 I665 I841

R2-2004732 Miscellaneous ASN.1 corrections related to I630, I631, I632, I633

Deadline: Wed June 10 0500 UTC

* [AT110-e][068][NR16] NR ASN1 4 (Lenovo)

Scope: ASN1 Naming A009 H001 E229 E257 E258 N033 S463, ASN1 Structure E228 E230 S656 Q022, R2-2004952 [E228][E230] On grouping similar parameters in PUSCH-Config/PDSCH-Config, Misc I654, S461, N021, R2-2004602 [I654] Adding DL AM RLC extension in NR RRC

Deadline: Wed June 10 0500 UTC

* [AT110-e][071][DCCA] New Cases (Huawei)

Scope: Treat R2-2004573, R2-2005239, R2-2005616, R2-2005629. Determine agreeable parts if any, and and make corresponding agreements.

Expected Outcome: Agreements

Deadline: June 5 0700 UTC

* [AT110-e][073][DCCA] Stage-2 Updates (vivo, Ericsson)

Scope: Treat documents under 6.10.5, determine agreeable parts and and make agreements. Implement meeting agreements in updated CRs.

Agreed CRs 36300 38300 (Ericsson) 37340 (vivo)

Deadline: June 11 0700 UTC

* [AT110-e][074][DCCA] UE capabilities (Huawei)

Scope: Treat documents under 6.10.2, determine agreeable parts and and make agreements. Implement meeting agreements in updated CRs.

Part 1: Agreements (rapporteur sets the deadline)

Part 2: Endorsed CRs 38306 38331 36306 36331 (For merge, good Q cover sheet etc)

Deadline: June 11 0700 UTC

* [AT110-e][075][NR16] Conflicting Configurations (Huawei)

Scope: Treat R2-2006057 (R1 Reply LS on conflicting configurations), R2-2004905 (H003), R2-2005262 (H245), R2-2005261 (H244), possibly other related papers (e.g. for URLLC, NR-U, eMIMO)

Intended outcome: Determine Impact R1 reply LS, Treat Related documents, Agree solutions.

Deadline: Wed June 10 0500 UTC

* [AT110-e][963][NR16] UE Capabilities (Intel, NTT Docomo)

Scope: The Main NR UE caps Email Thread for R2 110-e.

Follows the plan in R2-2006020. Relevant tdocs can be treated here

Deadlines: See R2-2006020 and Rapporteur announcements.

General

RAN2 110 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.

Scope

R17 will not be handled. R16 and earlier will be handled, all tdoc types, see also instructions for each agenda item.

The specific objectives of this meeting includes to finish all open Rel-16 Work Items, to finish the Rel-16 ASN.1 review, and conclude the Rel-16 UE capabilities work.

Specific methodology

R2 110e is expected to be conducted by email and by web conferences by GoToWebinar, in three parallel sessions. To facilitate easy treatment, some AIs may be summarized in summary tdoc.

Tdoc Limitation for some R16 items

Tdoc Limitation applies as indicated for an Agenda Item for all types of documents. As usual Rapporteur input (email discussion, WI rapporteur, TS rapporteur, assigned CR editor, assigned summary rapporteur etc) do not count. Corrections acknowledged but not addressed/resolved in email discussion, or acknowledged by TS rapporteur also do not count. For RRC, for accepted RIL issues, the proponent company may provide a discussion doc with annex TP (if needed) that do not count towards the tdoc limitation. Note that Contributions should be reserved for more complicated issued and minor issues are expected to be resolved in RRC email discussions or by CR rapporteur without any tdoc.

Endorsed or in-principle agreed CRs

CRs that were endorsed or in-principle agreed at previous bis-meeting, need to be provided for final agreement at this meeting

Rel-16 CRs

CRs for ongoing Rel-16 WIs, that were started last meeting, possibly endorsed, are expected to be updated to include agreements from R2-110-e, before final approval.

Note: Time Budget Comments remain in this document only for reference. They are not applicable for R2 110e.

# 1 Opening of the meeting

**This e-Meeting**

- This e-Meeting will follow 3GPP principles for e-Meetings, e.g. an e-Meeting is an ad-hoc meeting that do not count towards a company’s voting rights.

- RAN2 110 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.

- There will be some more leeway than usual to re-discuss or post-change agreements made at R2 110 electronic.

- Descriptions on how this meeting is conducted can be found in tdoc on RAN2 110 Methods and Guidance under agenda item 2.4 below

## 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

## 1.3 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.

## 1.4 Statement Regarding Engagement with Companies Added to the U.S. Export Administration Regulations (EAR) Entity List in 3GPP Activities

|  |
| --- |
| *Updated 2019-10-10*  **1. Public Information is Not Subject to EAR**  3GPP is an open platform where all contributions (including technology protected or not by patent) made by the different Individual Members under the membership of each respective Organizational Partner are publicly available. Indeed, contributions by all and any Individual Members are uploaded to a public file server when received and then the documents are effectively in the public domain.  In addition, since membership of email distribution lists is open to all, documents and emails distributed by that means are considered to be publicly available.  As a result, information contained in 3GPP contributions, documents, and emails distributed at 3GPP meetings or by 3GPP email distribution lists, because it is made available to the public without restrictions upon its further dissemination, is not subject to the export restrictions of the EAR.  Meeting minutes are maintained for 3GPP meetings. Such meeting minutes for 3GPP meetings are made available to the public without restrictions upon its further dissemination. As a result, information, including information conveyed orally, contained in 3GPP meetings is not subject to the export restriction of the EAR; this would include information conveyed during side meetings that may occur during the main meetings, if these meetings are open to any participants and the results of all said meetings are publicly available without restrictions upon their further dissemination.  **2. Non-Public Information**  Non-public information refers to the information not contained or not intended to be contained in 3GPP contributions, documents or emails. Such non-public information may be disclosed during informal meetings, exchanges, discussions or any form of other communication outside the 3GPP meetings and email distribution lists, and may be subject to the EAR.  **3. Other Information**  Certain encryption software controlled under the International Traffic in Arms Regulations (ITAR), even if publicly available, may still be subject to US export controls other than the EAR.  **4. Conduct of Meetings**  The situation should be considered as "business as usual" during all the meetings called by 3GPP.  **5. Responsibility of Individual Members**  It should be remembered that contributions, meetings, exchanges, discussions or any form of other communication in or outside the 3GPP meetings are of the accountability, integrity and the responsibility of each Individual Member. In addition, Individual Members remain responsible for ensuring their compliance with all applicable export control regulations, including but not limited to EAR.  Individual Members with questions regarding the impact of laws and regulations on their participation in 3GPP should contact their companies’ legal counsels. |

# 2 General

## 2.1 Approval of the agenda

[R2-2004300](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004300.zip) Agenda for RAN2#110-e Chairman agenda Late

Treated by email [000]

* [000] Approved

## 2.2 Approval of the report of the previous meeting

[R2-2004301](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004301.zip) RAN2#109bis-e Meeting Report MCC report Late

Treated by email [000]

* [000] Approved

## 2.3 Reporting from other meetings

## 2.4 Others

[R2-2004462](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004462.zip) RAN2#110-e Meeting Guidelines ETSI MCC discussion

Treated by email [000]

* [000] Endorsed

[R2-2006010](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006010.zip) Report R2 110e prep Web Conference RAN2 Chairman discussion

Treated by email [000]

* [000] Noted

# 3 Incoming liaisons

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

Rel-15

[R2-2004305](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004305.zip) Reply LS on UAV positioning (S1-201089; contact: InterDigital) SA1 LS in Rel-15 To:SA6 Cc:SA2, RAN1, RAN2

* [000] Noted

Rel-16

[R2-2006040](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006040.zip) LS Reply on QoE Measurement Collection (S4-200962; contact: Ericsson) SA4 LS in Rel-16 QOED To:SA5 Cc:CT1, RAN2, RAN3

* [000] Noted

[R2-2004380](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004380.zip) LS on updated Rel-16 LTE and NR parameter lists (R1-2003191; contact: Qualcomm) RAN1 LS in Rel-16 LTE\_eMTC5-Core, NB\_IOTenh3-Core, LTE\_DL\_MIMO\_EE-Core, LTE\_terr\_bcast-Core, NR\_2step\_RACH-Core, NR\_unlic-Core, NR\_IAB-Core, 5G\_V2X\_NRSL-Core, NR\_L1enh\_URLLC-Core, NR\_IIOT-Core, NR\_eMIMO-Core, NR\_UE\_pow\_sav-Core, NR\_pos-Core, NR\_Mob\_enh-Core, LTE\_NR\_DC\_CA\_enh-Core To:RAN2 Cc:RAN3

* [000] Noted

R2-2006241 Reply LS on energy efficiency (S5-203016; contact: Orange) SA5 LS in Rel-16 To:RAN3 Cc:RAN2, SA

* [000] Noted

Rel-17 postponed

[R2-2004306](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004306.zip) LS on 5GC assisted cell selection for accessing network slice (S2-2001728; contact: ZTE) SA2 LS in Rel-17 FS\_eNS\_Ph2 To:SA1, RAN2, RAN3

[R2-2004307](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004307.zip) Response LS on the “LS OUT on Location of UEs and associated key issues” (S3i200056; contact: Rogers) SA3-LI LS in Rel-17 FS\_5GSAT\_ARCH To:SA2, RAN2, RAN3

[R2-2004310](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004310.zip) LS on Requirements on positioning for UAS (S6-200269; contact: InterDigital) SA6 LS in Rel-17 FS\_UASAPP To:SA1 Cc:SA2, RAN2

[R2-2004311](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004311.zip) Reply LS to extend the scope of eV2X (SP-191379; contact: Telecom Italia) SA LS in Rel-17 FS\_eV2XARC\_Ph2 To:5GAA WG4 Cc:SA2, SA1, RAN, RAN2

[R2-2004330](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004330.zip) Response to 5GC assisted cell selection for accessing network slice (R3-202558; contact: ZTE) RAN3 LS in Rel-17 FS\_NR\_slice To:SA2 Cc:RAN, RAN2, SA1

[R2-2004335](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004335.zip) Response LS on the “LS out on Location of UEs and associated key issues” (R3-202824; contact: Thales)) RAN3 LS in Rel-17 FS\_5GSAT\_ARCH To:SA2, RAN2, SA3-LI

[R2-2005740](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005740.zip) LS on 5GC assisted cell selection for accessing network slice (S1-202264; contact: ZTE) SA1 LS in Rel-17 FS\_eNS\_Ph2 To:SA2 Cc:RAN2, RAN3

[R2-2006007](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006007.zip) Reply LS on GSMA NG.116 Attribute Area of service and impact on PLMN (S1-202294; contact: Nokia) SA1 LS in Rel-17 FS\_eNS\_Ph2 To: SA2, CT1, RAN2, RAN3, GSMA 5GJA, GSMA WAS

Rel-17 Replies Postponed

[R2-2005701](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005701.zip) draft Reply LS on 5GC assisted cell selection for accessing network slice ZTE Corporation, Sanechips LS out Rel-17 FS\_NR\_slice To:SA2 Cc:SA1, RAN3

# 4 EUTRA corrections Rel-15 and earlier

See Appendix A for reference to Work items, work item codes and WIDs.

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

## 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. No web conference is planned for this agenda item

### 4.1.0 In-principle agreed CRs

[R2-2005025](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005025.zip) Clarification on RLC UM SN size for NB-IoT Huawei, HiSilicon CR Rel-15 36.322 15.3.0 0145 2 F NB\_IOTenh2-Core R2-2004056

### 4.1.1 Other

[R2-2004317](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004317.zip) Reply LS on assistance indication for WUS (S2-2003217; contact: Qualcomm) SA2 LS in Rel-15 NB\_IOTenh3-Core, LTE\_eMTC5-Core To:RAN3, RAN2 Cc:CT1

[R2-2004812](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004812.zip) Allow sending Rel-14 AS RAI when no UL grant MediaTek Inc. discussion Late

[R2-2004816](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004816.zip) Allow sending Rel-14 AS RAI when no UL grant MediaTek Inc. CR Rel-14 36.321 14.12.0 1475 - F NB\_IOTenh-Core Late

R2-2004819 Allow sending Rel-14 AS RAI when no UL grant MediaTek Inc. CR Rel-14 36.321 14.12.0 1476 - F NB\_IOTenh-Core Withdrawn

[R2-2004828](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004828.zip) Allow sending Rel-14 AS RAI when no UL grant MediaTek Inc. CR Rel-15 36.321 15.8.0 1477 - A NB\_IOTenh-Core Late

[R2-2005012](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005012.zip) Discussion on eNB knowledge of UE Radio paging capability when UE is in RRC\_CONNECTED mode Huawei, HiSilicon discussion Rel-15 NB\_IOTenh2-Core, LTE\_eMTC4-Core

[R2-2005013](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005013.zip) System support for Wake Up Signal Huawei, HiSilicon CR Rel-15 36.300 15.9.0 1264 1 F NB\_IOTenh2-Core, LTE\_eMTC4-Core R2-2000809

[R2-2005014](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005014.zip) System support for (Group) Wake Up Signal Huawei, HiSilicon draftCR Rel-16 36.300 16.1.0 NB\_IOTenh2-Core, LTE\_eMTC4-Core, NB\_IOTenh3-Core, LTE\_eMTC5-Core R2-2000810

[R2-2005015](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005015.zip) System support for Wake Up Signal Huawei, HiSilicon CR Rel-15 36.304 15.5.0 0795 - F NB\_IOTenh2-Core, LTE\_eMTC4-Core R2-2000608

[R2-2005016](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005016.zip) System support for Wake Up Signal Huawei, HiSilicon CR Rel-16 36.304 16.0.0 0796 - A NB\_IOTenh2-Core, LTE\_eMTC4-Core

[R2-2005017](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005017.zip) System support for Group Wake Up Signal Huawei, HiSilicon draftCR Rel-16 36.304 16.0.0 NB\_IOTenh3-Core, LTE\_eMTC5-Core

[R2-2005026](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005026.zip) Clarification on PHR report for power class 14dBm UE Huawei, HiSilicon CR Rel-15 36.321 15.8.0 1478 - F NB\_IOTenh2-Core

[R2-2005027](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005027.zip) Clarification on PHR report for power class 14dBm UE Huawei, HiSilicon CR Rel-16 36.321 16.0.0 1479 - A NB\_IOTenh2-Core

[R2-2005199](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005199.zip) [draft] Reply LS on assistance indication for WUS Qualcomm Incorporated LS out Rel-15 NB\_IOTenh2-Core, LTE\_eMTC4-Core To:SA2, RAN3 Cc:CT1

[R2-2005200](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005200.zip) Restrict WUS to last used cell Qualcomm Incorporated CR Rel-15 36.300 15.9.0 1282 - C NB\_IOTenh2-Core, LTE\_eMTC4-Core

[R2-2005201](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005201.zip) Restrict WUS to last used cell Qualcomm Incorporated CR Rel-16 36.300 16.1.0 1283 - A NB\_IOTenh2-Core, LTE\_eMTC4-Core

[R2-2005202](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005202.zip) Restrict WUS to last used cell Qualcomm Incorporated CR Rel-15 36.304 15.5.0 0798 - C NB\_IOTenh2-Core, LTE\_eMTC4-Core

[R2-2005203](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005203.zip) Restrict WUS to last used cell Qualcomm Incorporated CR Rel-16 36.304 16.0.0 0799 - A NB\_IOTenh2-Core, LTE\_eMTC4-Core

[R2-2005588](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005588.zip) Clarification for dedicated SR with HARQ-ACK ZTE Corporation, Sanechips, MediaTek Inc. CR Rel-15 36.321 15.8.0 1469 1 F NB\_IOTenh2-Core R2-2003254

[R2-2005590](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005590.zip) Clarification for dedicated SR with HARQ-ACK ZTE Corporation, Sanechips, MediaTek Inc CR Rel-16 36.321 16.0.0 1483 - A NB\_IOTenh2-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. No web conference is planned for this agenda item

### 4.2.0 In-principle agreed CRs

[R2-2005081](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005081.zip) Adding Reception Type for uplink HARQ ACK feedback for Rel-15 eMTC Huawei, HiSilicon CR Rel-15 36.302 15.2.0 1208 2 F LTE\_eMTC4-Core R2-2003933

[R2-2005082](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005082.zip) Adding Reception Type for uplink HARQ ACK feedback for Rel-15 eMTC Huawei, HiSilicon CR Rel-16 36.302 16.0.0 1210 - A LTE\_eMTC4-Core

[R2-2005591](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005591.zip) Correction on reception type combination for eMTC ZTE Corporation, Sanechips, Sequans Communications CR Rel-13 36.302 13.7.0 1204 2 F LTE\_MTCe2\_L1-Core R2-2003937

[R2-2005596](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005596.zip) Correction on reception type combination for eMTC ZTE Corporation, Sanechips, Sequans Communications CR Rel-14 36.302 14.5.0 1205 1 A LTE\_MTCe2\_L1-Core R2-2003190

[R2-2005602](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005602.zip) Correction on reception type combination for eMTC ZTE Corporation, Sanechips, Sequans Communications CR Rel-15 36.302 15.2.0 1206 1 A LTE\_MTCe2\_L1-Core R2-2003222

[R2-2005609](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005609.zip) Correction on reception type combination for eMTC ZTE Corporation, Sanechips, Sequans Communications CR Rel-16 36.302 16.0.0 1207 1 A LTE\_MTCe2\_L1-Core R2-2003228

### 4.2.1 Other

[R2-2004627](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004627.zip) Relaxed serving cell measurement for UEs using WUS Qualcomm Technologies Int CR Rel-15 36.331 15.9.0 4298 - B LTE\_eMTC4-Core

[R2-2004634](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004634.zip) Relaxed serving cell measurement for UEs using WUS Qualcomm Technologies Int draftCR Rel-16 36.331 16.0.0 F LTE\_eMTC5-Core, LTE\_eMTC4-Core

[R2-2004654](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004654.zip) [Draft] LS on implementation of relaxed serving cell measurement by Rel-15 UEs Qualcomm Technologies Int LS out Rel-15 LTE\_eMTC4-Core To:RAN4

[R2-2005010](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005010.zip) Clarification for CP EDT Huawei, HiSilicon CR Rel-15 36.304 15.5.0 0793 - F NB\_IOTenh2-Core, LTE\_eMTC4-Core

[R2-2005011](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005011.zip) Clarification for CP EDT Huawei, HiSilicon CR Rel-16 36.304 16.0.0 0794 - A NB\_IOTenh2-Core, LTE\_eMTC4-Core

[R2-2005018](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005018.zip) Porting back corrections made during Rel-16 ASN.1 review Huawei, HiSilicon CR Rel-15 36.331 15.9.0 4303 - F NB\_IOTenh2-Core, LTE\_eMTC4-Core

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

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

### 4.3.0 In-principle agreed CRs

### 4.3.1 Other

[R2-2005572](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005572.zip) Correction on Uu and PC5 prioritization ASUSTeK CR Rel-14 36.321 14.12.0 1471 1 F LTE\_V2X-Core R2-2003642

[R2-2005573](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005573.zip) Correction on Uu and PC5 prioritization ASUSTeK CR Rel-15 36.321 15.8.0 1470 1 A LTE\_eV2X-Core R2-2003641

## 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.

### 4.4.0 In-principle agreed CRs

### 4.4.1 Other

## 4.5 Other LTE corrections Rel-15 and earlier

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

[R2-2005283](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005283.zip) Minor changes collected by Rapporteur Samsung Telecommunications CR Rel-15 36.331 15.9.0 4314 - F MBMS\_LTE\_enh2-Core, TEI15 R2-2003233 Late

=> Revised in R2-2005995

R2-2005995 Minor changes collected by Rapporteur Samsung Telecommunications CR Rel-15 36.331 15.9.0 4314 1 F MBMS\_LTE\_enh2-Core, TEI15 Late

### 4.5.0 In-principle agreed CRs

### 4.5.1 Other

[R2-2004407](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004407.zip) Correction on SRB duplication OPPO, LG Electronics CR Rel-15 36.323 15.5.0 0280 1 F LTE\_HRLLC R2-2002619

[R2-2004408](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004408.zip) Correction on SRB duplication OPPO, LG Electronics CR Rel-16 36.323 16.0.0 0281 1 A LTE\_HRLLC R2-2002620

[R2-2005083](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005083.zip) Correction to the LTE Rel-15 TDD/FDD capability differentiation Huawei, HiSilicon CR Rel-15 36.331 15.9.0 4304 - F TEI15

[R2-2005084](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005084.zip) Correction to the LTE Rel-15 TDD/FDD capability differentiation Huawei, HiSilicon CR Rel-16 36.331 16.0.0 4305 - A TEI15

[R2-2005186](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005186.zip) Clarification to UE capabilities for non-contiguous intra-band CA Nokia, Nokia Shanghai Bell, Qualcomm Incorporated CR Rel-12 36.331 12.18.0 4247 1 F LTE\_CA-Core, TEI12 R2-2003147

[R2-2005187](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005187.zip) Clarification to UE capabilities for non-contiguous intra-band CA Nokia, Nokia Shanghai Bell, Qualcomm Incorporated CR Rel-13 36.331 13.15.0 4248 1 A LTE\_CA-Core, TEI12 R2-2003148

[R2-2005188](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005188.zip) Clarification to UE capabilities for non-contiguous intra-band CA Nokia, Nokia Shanghai Bell, Qualcomm Incorporated CR Rel-14 36.331 14.14.0 4249 1 A LTE\_CA-Core, TEI12 R2-2003149

[R2-2005189](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005189.zip) Clarification to UE capabilities for non-contiguous intra-band CA Nokia, Nokia Shanghai Bell, Qualcomm Incorporated CR Rel-15 36.331 15.9.0 4250 1 A LTE\_CA-Core, TEI12 R2-2003150

[R2-2005190](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005190.zip) Clarification to UE capabilities for non-contiguous intra-band CA Nokia, Nokia Shanghai Bell, Qualcomm Incorporated CR Rel-16 36.331 16.0.0 4251 1 A LTE\_CA-Core, TEI12 R2-2003151

[R2-2005191](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005191.zip) Clarification on codebook-HARQ-ACK-r13 capability for CA with more than 5CCs Nokia, Nokia Shanghai Bell, Qualcomm Incorporated CR Rel-13 36.306 13.12.0 1747 1 F LTE\_CA\_enh\_b5C-Core R2-2003152

[R2-2005192](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005192.zip) Clarification on codebook-HARQ-ACK-r13 capability for CA with more than 5CCs Nokia, Nokia Shanghai Bell, Qualcomm Incorporated CR Rel-14 36.306 14.11.0 1748 1 A LTE\_CA\_enh\_b5C-Core R2-2003153

[R2-2005193](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005193.zip) Clarification on codebook-HARQ-ACK-r13 capability for CA with more than 5CCs Nokia, Nokia Shanghai Bell, Qualcomm Incorporated CR Rel-15 36.306 15.8.0 1749 1 A LTE\_CA\_enh\_b5C-Core R2-2003154

[R2-2005194](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005194.zip) Clarification on codebook-HARQ-ACK-r13 capability for CA with more than 5CCs Nokia, Nokia Shanghai Bell, Qualcomm Incorporated CR Rel-16 36.306 16.0.0 1750 2 A LTE\_CA\_enh\_b5C-Core R2-2003859

[R2-2005351](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005351.zip) Correction on t312 timer information ZTE Corporation, Sanechips CR Rel-12 36.331 12.18.0 4316 - F HetNet\_eMOB\_LTE-Core

[R2-2005352](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005352.zip) Correction on t312 timer information ZTE Corporation, Sanechips CR Rel-13 36.331 13.15.0 4317 - A HetNet\_eMOB\_LTE-Core

[R2-2005353](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005353.zip) Correction on t312 timer information ZTE Corporation, Sanechips CR Rel-14 36.331 14.14.0 4318 - A HetNet\_eMOB\_LTE-Core

[R2-2005354](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005354.zip) Correction on t312 timer information ZTE Corporation, Sanechips CR Rel-15 36.331 15.9.0 4319 - A HetNet\_eMOB\_LTE-Core

[R2-2005355](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005355.zip) Correction on t312 timer information ZTE Corporation, Sanechips CR Rel-16 36.331 16.0.0 4320 - A HetNet\_eMOB\_LTE-Core

[R2-2005481](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005481.zip) Clarification on UE capability for intra-band non-continuous CA Huawei, Hisilicon CR Rel-10 36.331 10.22.0 4327 - F LTE\_CA-Core

[R2-2005482](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005482.zip) Clarification on UE capability for intra-band non-continuous CA Huawei, Hisilicon CR Rel-11 36.331 11.19.0 4328 - A LTE\_CA-Core

[R2-2005483](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005483.zip) Clarification on UE capability for intra-band non-continuous CA Huawei, Hisilicon CR Rel-12 36.331 12.18.0 4329 - F LTE\_CA-Core

[R2-2005484](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005484.zip) Clarification on UE capability for intra-band non-continuous CA Huawei, Hisilicon CR Rel-13 36.331 13.15.0 4330 - F LTE\_CA-Core

[R2-2005485](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005485.zip) Clarification on UE capability for intra-band non-continuous CA Huawei, Hisilicon CR Rel-14 36.331 14.14.0 4331 - A LTE\_CA-Core

[R2-2005486](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005486.zip) Clarification on UE capability for intra-band non-continuous CA Huawei, Hisilicon CR Rel-15 36.331 15.9.0 4332 - A LTE\_CA-Core

[R2-2005487](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005487.zip) Clarification on UE capability for intra-band non-continuous CA Huawei, Hisilicon CR Rel-16 36.331 16.0.0 4333 - A LTE\_CA-Core

[R2-2005551](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005551.zip) PDU generation for UL spatial multiplexing ASUSTeK discussion Rel-15 LTE\_LATRED\_L2-Core, TEI14

[R2-2005552](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005552.zip) Correction on PDU generation for UL spatial multiplexing ASUSTeK CR Rel-14 36.321 14.12.0 1480 - F LTE\_LATRED\_L2-Core, TEI14

[R2-2005553](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005553.zip) Correction on PDU generation for UL spatial multiplexing ASUSTeK CR Rel-15 36.321 15.8.0 1481 - A LTE\_LATRED\_L2-Core, TEI14

[R2-2005554](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005554.zip) Correction on PDU generation for UL spatial multiplexing ASUSTeK CR Rel-16 36.321 16.0.0 1482 - A LTE\_LATRED\_L2-Core, TEI14

[R2-2005678](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005678.zip) Correction of AUL HARQ process ASUSTeK CR Rel-15 36.331 15.9.0 4340 - F LTE\_unlic-Core

[R2-2005743](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005743.zip) [AT110-e#201][LTE] LTE Rel-15 TDD/FDD capability differentiation [Pre-meeting] Huawei, HiSilicon discussion Rel-15 TEI15 Late

# 5 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

## 5.1 Organisational

Incoming LSs, etc.

New Incoming LS

[R2-2006123](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006123.zip) LS on clarification for the definition of the UL duty cycle (R4-2008418; contact: Apple) Rel-15 NR\_NewRAT-Core RAN2

- intel wonder if the max UL tx power is for the UE or network. Docomo wonder if this is the UE power class of configured max power. Apple think we don’t have any configure max power for FR2 so this is the power class.

- QC think this proposal makes sense.

* noted

[R2-2006163](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006163.zip) Clarification to maxUplinkDutyCycle-FR2 Apple CR Rel-15 38.306 0354 F NR\_newRAT-Core

* agreed

[R2-2006164](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006164.zip) Clarification to maxUplinkDutyCycle-FR2 Apple CR Rel-16 38.306 0355 F NR\_newRAT-Core

* agreed

## 5.2 Stage 2

### 5.2.1 Stage 2 corrections for TS 38.300

You should discuss your stage 2 CRs with the specification rapporteurs before submission.

* [AT110-e][001][NR15] Corrections 38300 (vivo)

Scope: Treat R2-2004442, R2-2004443, R2-2004846, R2-2004847, R2-2004848, R2-2004849, R2-2004850, R2-2004851 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: Others: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC.

[R2-2006359](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006359.zip) Summary of offline discussion #001: Correction on 38300 vivo

* [001] Noted

#### 5.2.1.0 In-principle agreed CRs

#### 5.2.1.1 Other

[R2-2004442](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004442.zip) Correction on bandwidth adaptation vivo, Nokia (rapporteur) CR Rel-15 38.300 15.9.0 0223 - F NR\_newRAT-Core

[R2-2006370](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006370.zip) Correction on bandwidth adaptation vivo, Nokia (rapporteur) CR Rel-15 38.300 15.9.0 0223 1 F NR\_newRAT-Core

* [001] Agreed

[R2-2004443](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004443.zip) Correction on bandwidth adaptation vivo, Nokia (rapporteur) CR Rel-16 38.300 16.1.0 0224 - A NR\_newRAT-Core

[R2-2006371](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006371.zip) Correction on bandwidth adaptation vivo, Nokia (rapporteur) CR Rel-16 38.300 16.1.0 0224 1 A NR\_newRAT-Core

* [001] Agreed

- [001] Chair Comment, half time (june 4): It seems there is support to have corrections on bandwidth adaptations, however there is also some detailed comments, R2-2004442 and R2-2004443 might need to be revised (disc can continue).

6 docs moved here:

[R2-2004846](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004846.zip) Clarification for KPAS and EU-alert 38.300 Ericsson CR Rel-15 38.300 15.9.0 0231 - F NR\_newRAT-Core

[R2-2004847](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004847.zip) Clarification for KPAS and EU-alert 38.300 Ericsson CR Rel-16 38.300 16.1.0 0232 - A NR\_newRAT-Core

* [001] Postpone

[R2-2004848](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004848.zip) Clarification for KPAS and EU-alert 38.304 Ericsson CR Rel-15 38.304 15.6.0 0168 - F NR\_newRAT-Core

[R2-2004849](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004849.zip) Clarification for KPAS and EU-alert 38.304 Ericsson CR Rel-16 38.304 16.0.0 0169 - A NR\_newRAT-Core

=> Revised in R2-2006233

[R2-2006233](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006233.zip) Clarification for KPAS and EU-alert 38.304 Ericsson CR Rel-16 38.304 16.0.0 0169 1 A NR\_newRAT-Core

* [001] Postpone

[R2-2004850](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004850.zip) Clarification for KPAS and EU-alert 38.331 Ericsson CR Rel-15 38.331 15.9.0 1628 - F NR\_newRAT-Core

=> Revised in R2-2006234

R2-2006234 Clarification for KPAS and EU-alert 38.331 Ericsson CR Rel-15 38.331 15.9.0 1628 1 F NR\_newRAT-Core

[R2-2004851](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004851.zip) Clarification for KPAS and EU-alert 38.331 Ericsson CR Rel-16 38.331 16.0.0 1629 - A NR\_newRAT-Core

=> Revised in R2-2006235

[R2-2006235](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006235.zip) Clarification for KPAS and EU-alert 38.331 Ericsson CR Rel-16 38.331 16.0.0 1629 1 A NR\_newRAT-Core

* [001] Postpone

- [001] Chair Comment, half time (june 4) : There was one objection raised for the KPAS and EU-alert CRs, but from the wording I understand that it might anyway be agreeable to have the CRs as they align with precedent cases, So for now we assume that we have these CRs, (or revised versions - in case there are further detailed comments).

- [001] Chair: Objection to all CRs except the Stage-2 CR

- [001] Chair suggest to postpone: We started by supporting a specific regional system, and another, and the result is now that we refer to these specific systems in many places in our specifications, which is something we usually try to avoid. Then other regional warning systems adopt the same delivery mechanisms, and our 3GPP public warning/alert support seems to now have turned into a general function rather than support for specific system, so we can think of documentation strategy until next meeting. If no change in proposals and positions, and no new conclusion seems likely, we can at least agree the stage-2 CR, without fully repeating this discussion again

### 5.2.2 Stage 2 corrections for TS 37.340

You should discuss your stage 2 CRs with the specification rapporteurs before submission.

* [AT110-e][002][NR15] Corrections 37340 (ZTE)

Scope: Treat R2-2005163 (IPA), R2-2005164 (IPA), R2-2005230, R2-2005231, R2-2005356, R2-2005357 (proponents are responsible to explain and drive)

Part 1: Agree In-principe agreed (IPA) CRs. Others: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: Others: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC.

#### 5.2.2.0 In-principle agreed CRs

[R2-2005163](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005163.zip) Correction on MN-SN measurements coordination in INM Ericsson CR Rel-15 37.340 15.8.0 0193 2 F NR\_newRAT-Core R2-2004249

[R2-2005164](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005164.zip) Correction on MN-SN measurements coordination in INM Ericsson CR Rel-16 37.340 16.1.0 0194 2 A NR\_newRAT-Core R2-2004250

2 Treated by email [002]

* [002] Both agreed

#### 5.2.2.1 Other

[R2-2005230](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005230.zip) Clarification on PDCP version change Huawei, HiSilicon, ZTE Corporation (Rapporteur) CR Rel-15 37.340 15.8.0 0166 3 F NR\_newRAT-Core R2-2003685

* [002] Not Pursued

[R2-2005231](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005231.zip) Clarification on PDCP version change Huawei, HiSilicon, ZTE Corporation (Rapporteur) CR Rel-16 37.340 16.1.0 0198 1 A NR\_newRAT-Core R2-2003686

2 Treated by email [002]

- [002] Chair half-time (june 4): no objections so far so it might be agreeable.

- [002] RAP: Note that the Cat on the cover sheet is F, which would be correct.

* [002] Agreed

[R2-2005356](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005356.zip) Corrections to MAC description ZTE Corporation (Rapporteur), Ericsson, Huawei, HiSilicon CR Rel-15 37.340 15.8.0 0204 - F NR\_newRAT-Core

R2-2006167 Corrections to MAC description ZTE Corporation (Rapporteur), Ericsson, Huawei, HiSilicon CR Rel-15 37.340 15.8.0 0204 1 F NR\_newRAT-Core

[R2-2005357](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005357.zip) Corrections to MAC description ZTE Corporation (Rapporteur), Ericsson, Huawei, HiSilicon CR Rel-16 37.340 16.1.0 0205 - A NR\_newRAT-Core

R2-2006168 Corrections to MAC description ZTE Corporation (Rapporteur), Ericsson, Huawei, HiSilicon CR Rel-16 37.340 16.1.0 0205 1 A NR\_newRAT-Core

2 Treated by email [002]

- [002] Chair half-time (june 4): The CRs seems agreeable, can continue.

* [002] Both Agreed

### 5.2.3 Positioning

Corrections to both the stage 2 and stage 3 aspects related to positioning. Stage 2 CRs should be discussed with the specification rapporteur before submission.

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

#### 5.2.3.0 In-principle agreed CRs

[R2-2004734](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004734.zip) CR to clarify the meaning of GNSS term in 36.305 Rel-15 ESA, Nokia, Nokia Shanghai Bell CR Rel-15 36.305 15.4.0 0086 1 F NR\_pos-Core R2-2003991

[R2-2004735](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004735.zip) CR to clarify the meaning of GNSS term in 36.305 Rel-16 ESA, Nokia, Nokia Shanghai Bell CR Rel-16 36.305 16.0.0 0087 1 A NR\_pos-Core R2-2003992

[R2-2004745](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004745.zip) CR to clarify the meaning of GNSS term in 38.305 Rel-15 ESA, Nokia, Nokia Shanghai Bell CR Rel-15 38.305 15.5.0 0020 1 F NR\_pos-Core R2-2003993

[R2-2004746](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004746.zip) CR to clarify the meaning of GNSS term in 38.305 Rel-16 ESA, Nokia, Nokia Shanghai Bell CR Rel-16 38.305 16.0.0 0021 1 A NR\_pos-Core R2-2003994

[R2-2004790](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004790.zip) Clarification on UE Positioning Architecture in 38 305 for Rel-15 CATT CR Rel-15 38.305 15.5.0 0018 1 F NR\_newRAT-Core R2-2004143

[R2-2004791](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004791.zip) Clarification on UE Positioning Architecture in 38 305 for Rel-16 CATT CR Rel-16 38.305 16.0.0 0019 1 A NR\_newRAT-Core R2-2004144

#### 5.2.3.1 Other

## 5.3 Stage 3 user plane

Essential functional corrections.

* [AT110-e][013][NR15] User Plane Corrections (Samsung)

Scope: Treat R2-2004423, R2-2004424, R2-2004940, R2-2004942, R2-2005555, R2-2005557. R2-2005471, and possibly in part 2 R2-2005556, R2-2005558, R2-2005559, R2-2005560, R2-2005561, R2-2005472 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: Others: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC.

[R2-2006158](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006158.zip) Report of [AT110e][013][NR15] User Plane Corrections (Samsung) Samsung

* [013] Noted, proposals are agreed, see below.

### 5.3.1 MAC

#### 5.3.1.0 In-principle agreed CRs

#### 5.3.1.1 Other

R2-2006158 Report of [AT110e][013][NR15] User Plane Corrections (Samsung) Samsung discussion Rel-15 NR\_newRAT-Core

[R2-2004423](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004423.zip) Clarification on obtaining of PH values Samsung CR Rel-15 38.321 15.8.0 0738 - F NR\_newRAT-Core

[R2-2004424](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004424.zip) Clarification on obtaining of PH values Samsung CR Rel-16 38.321 16.0.0 0739 - A NR\_newRAT-Core

2 Treated by email [013]

* [013] R2-2004423 and R2-2004424 are agreed.

[R2-2004940](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004940.zip) Clarification on preamble selection for beam failure recovery Google Inc. CR Rel-15 38.321 15.8.0 0749 - F NR\_newRAT-Core

[R2-2004942](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004942.zip) Clarification on preamble selection for beam failure recovery Google Inc. CR Rel-16 38.321 16.0.0 0750 - A NR\_newRAT-Core

2 Treated by email [013]

* [013] R2-2004940 and R2-2004942 are not pursued.

[R2-2005555](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005555.zip) Discussion on clarification of BWP inactivity timer operation ASUSTeK discussion Rel-15 NR\_newRAT-Core

[R2-2005556](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005556.zip) Clarification of BWP inactivity timer operation ASUSTeK CR Rel-15 38.321 15.8.0 0753 - F NR\_newRAT-Core

2 Treated by email [013]

* [013] R2-2005555 is noted, and R2-2005556 is not pursued.
* [013] RAN2 confirms that *bwp-InactivityTimer* is not (re-)started, if the MAC entity receives PDCCH, which results BWP switching to default/initial BWP; No specification changes are needed.

[R2-2005557](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005557.zip) Discussion on presence of IEs in BeamFailureRecoveryConfig ASUSTeK discussion Rel-15 NR\_newRAT-Core

[R2-2005558](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005558.zip) Clarification on presence of IEs in BeamFailureRecoveryConfig ASUSTeK CR Rel-15 38.331 15.9.0 1679 - F NR\_newRAT-Core

[R2-2005559](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005559.zip) Clarification on presence of IEs in BeamFailureRecoveryConfig ASUSTeK CR Rel-16 38.331 16.0.0 1680 - A NR\_newRAT-Core

* [013] R2-2005557 is noted, and R2-2005558 and R2-2005559 are not pursued.
* [013] RAN2 confirms that both *rsrp-ThresholdSSB* and *rach-ConfigBFR* should be configured when *beamFailureRecoveryConfig* is configured.

[R2-2005560](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005560.zip) Handling on absence of IEs in BeamFailureRecoveryConfig ASUSTeK CR Rel-15 38.321 15.8.0 0754 - F NR\_newRAT-Core

[R2-2005561](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005561.zip) Handling on absence of IEs in BeamFailureRecoveryConfig ASUSTeK CR Rel-16 38.321 16.0.0 0755 - A NR\_newRAT-Core

* [013] R2-2005560 and R2-2005561 are not pursued.

### 5.3.2 RLC

#### 5.3.2.0 In-principle agreed CRs

#### 5.3.2.1 Other

[R2-2005471](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005471.zip) Discussion on missing RLC segment in RLC STATUS PDU Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

Treated by email [013]

* [013] Noted

[R2-2005472](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005472.zip) Clarification on the reception status of RLC STATUS PDU Huawei, HiSilicon CR Rel-15 38.322 15.5.0 0035 - F NR\_newRAT-Core

* [013] Not pursued
* [013] RAN2 confirms that the ACK\_SN in the RLC Status PDU may correspond to a partially received RLC SDU, as in LTE.

### 5.3.3 PDCP

#### 5.3.3.0 In-principle agreed CRs

#### 5.3.3.1 Other

### 5.3.4 SDAP

#### 5.3.4.0 In-principle agreed CRs

#### 5.3.4.1 Other

## 5.4 Stage 3 control plane

Essential functional corrections.

### 5.4.1 NR RRC

Including all architecures

* [AT110-e][003][NR15] Misc RRC Corrections (Ericsson)

Scope: Treat R2-2005000 (IPA), R2-2005001 (IPA), R2-2005641 (IPA), R2-2005642 (IPA), R2-2005643 (IPA), R2-2005644 (IPA), R2-2004853 (IPA), R2-2004854 (IPA), R2-2005233 (IPA), R2-2005234 (IPA), R2-2005322, R2-2004912, R2-2004913, R2-2005165, R2-2005166 (proponents are responsible to explain and drive)

Part 1: Agree In-principe agreed (IPA) CRs. Others: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: Others: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

[R2-2006042](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006042.zip) Report of [AT110-e][003][NR15] Misc RRC Corrections Ericsson report Rel-15 NR\_newRAT-Core

* [003] Noted, proposals are agreed, see below

#### 5.4.1.0 In-principle Agreed CRs

[R2-2005000](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005000.zip) Correction on PUCCH configuration Huawei, HiSilicon CR Rel-15 38.331 15.9.0 1567 2 F NR\_newRAT-Core R2-2004135

[R2-2005001](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005001.zip) Correction on PUCCH configuration Huawei, HiSilicon CR Rel-16 38.331 16.0.0 1568 2 A NR\_newRAT-Core R2-2004136

2 Treated by email [003]

* [003] Both agreed

[R2-2005641](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005641.zip) Clarification on pdcp-Duplication at RRC Reconfiguration Samsung CR Rel-15 38.331 15.9.0 1534 2 F NR\_newRAT-Core R2-2004119

[R2-2005642](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005642.zip) Clarification on pdcp-Duplication at RRC Reconfiguration Samsung CR Rel-16 38.331 16.0.0 1587 1 A NR\_newRAT-Core R2-2004140

[R2-2005643](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005643.zip) Clarification on pdcp-Duplication at RRC Reconfiguration Samsung CR Rel-15 38.300 15.9.0 0221 1 F NR\_newRAT-Core R2-2004138

[R2-2005644](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005644.zip) Clarification on pdcp-Duplication at RRC Reconfiguration Samsung CR Rel-16 38.300 16.1.0 0222 1 A NR\_newRAT-Core R2-2004139

4 Treated by email [003]

* [003] All 4 CRs are agreed

[R2-2004853](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004853.zip) Clarification for SIB6, SIB7 and SIB6 acquisition during a measurement gap Ericsson, NTT DOCOMO INC, Nokia, InterDigital CR Rel-15 38.331 15.9.0 1630 - F NR\_newRAT-Core

[R2-2004854](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004854.zip) Clarification for SIB6, SIB7 and SIB6 acquisition during a measurement gap Ericsson, NTT DOCOMO INC, Nokia, InterDigital CR Rel-16 38.331 16.0.0 1631 - A NR\_newRAT-Core

2 Treated by email [003]

* [003] Both agreed

[R2-2005233](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005233.zip) Correction on the need for reconfiguration with sync in (NG)EN-DC, NR-DC and NE-DC Huawei, HiSilicon, Ericsson CR Rel-15 38.331 15.9.0 1571 2 F NR\_newRAT-Core R2-2004269

[R2-2005234](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005234.zip) Correction on the need for reconfiguration with sync in (NG)EN-DC, NR-DC and NE-DC Huawei, HiSilicon, Ericsson CR Rel-16 38.331 16.0.0 1572 2 A NR\_newRAT-Core R2-2004270

2 Treated by email [003]

* [003] Both agreed

#### 5.4.1.5 Other

General RRC

Rapporteur CR

[R2-2005321](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005321.zip) Miscellaneous non-controversial corrections Set VI Ericsson CR Rel-15 38.331 15.9.0 1667 - F NR\_newRAT-Core

[R2-2005322](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005322.zip) Miscellaneous non-controversial corrections Set VI Ericsson CR Rel-16 38.331 16.0.0 1668 - A NR\_newRAT-Core

DISCUSSION

- [003] Chair half-time (june 4): The Contents of he CRs R2-2005321 and R2-2005322 is agreeable as-is, but more contents will be merged, so they will be revised.

* [Post110-e][003][NR15] Misc RRC Corrections (Ericsson)

Expected Outcome: Agreed Rapporteur CRs (revisions of R2-2005321/22).

Deadline: Short

Terminology SpCell

[R2-2004912](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004912.zip) Correction on SpCell OPPO CR Rel-15 38.331 15.9.0 1635 - F NR\_newRAT-Core

[R2-2004913](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004913.zip) Correction on SpCell OPPO CR Rel-16 38.331 16.0.0 1636 - A NR\_newRAT-Core

2 Treated by email [003]

* [003] The Contents of the CRs in R2-2004912 and R2-2004913 is agreed with the following changes

a) In the first two changes, replace “SpCell (PCell of MCG or SCG)” with “PCell”

b) The third change is agreed as it is.

And is merged with the Rapporteur’s CRs

Terminology Handover

[R2-2005165](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005165.zip) Correction to inter-system (intra-system) handover terminology Ericsson CR Rel-15 38.331 15.9.0 1653 - F NR\_newRAT-Core

[R2-2005166](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005166.zip) Correction to inter-system (intra-system) handover terminology Ericsson CR Rel-16 38.331 16.0.0 1654 - A NR\_newRAT-Core

2 Treated by email [003]

* [003] Both not pursued

Withdrawn:

R2-2005581 Discussion on AS rekeying failure handling Huawei, HiSilicon discussion NR\_newRAT-Core Late

#### 5.4.1.1 Connection control

Including L1 Parameters, L2 Parameters, Connection establishment and release, Connection reconfiguration (also reconfig with sync, Handover), Connection resume and release with RRC\_INACTIVE state, Security procedures, re-establishment, RRC processing delay requirements etc.

* [AT110-e][004][NR15] L1 Parameters (Qualcomm)

Scope: Treat R2-2004468, R2-2004469, R2-2005072, R2-2005073, R2-2005110, R2-2005111, R2-2004773, R2-2004774 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

L1 Parameters

SRS-CarrierSwitching

[004] DISCUSSION at Half-time

- [004] Rap, at half-time: For clarification on srs-TPC-PDCCH-Group with 32 entries for type A, 7 companies agree Alt-1, and 1 company prefer Alt-2 but can accept Alt-1 with some rewording. As rapporteur, we suggest to agree Alt-1 (R2-2004468/R2-2004469) as baseline, and can further discuss wording in phase-2.

- [004] Chairman, at half-time: For clarification on cc-SetIndex for type A, there is no common view between companies that a clarification shall be done. However, as Ericsson point out, three code points are specified in R1 and signalling seems to allow 4 code-point, and thus It is indeed reasonable to clarify something in RRC. Rap: It seems no company show disagree on revised clarification.

- [004] Rap, at half-time: For on srs-CC-SetIndexlist for type B, 7 companies prefer Alt-1 (R2-2004468/R2-2004469), and 1 company prefer Alt-2 but can accept Alt-1.

* [004] half-time agreement: [R2-2004468](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004468.zip)/[R2-2004469](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004469.zip) on SRS Switching including the wording “For Type A, the network does not configure the field cc-SetIndex to 3 in this release of specification” are agreed as baseline. Further wording enhancement can be discussed in phase 2
* [004] RAN2 understanding is that for typeA "uplink carrier in which the *SRS-CarrierSwitching* field is configured" can be applied to any uplink carrier, except for the case that a UE is not configured for PUSCH/PUCCH transmission on SUL. Whether it is also applied to the exception case is still pending on RAN1 reply.

[R2-2004468](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004468.zip) CR on SRS-CarrierSwitching ZTE Corporation, Sanechips, Qualcomm Incorporated CR Rel-15 38.331 15.9.0 1518 1 F NR\_newRAT-Core R2-2002698

=> Revised in R2-2006107

[R2-2006107](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006107.zip) CR on SRS-CarrierSwitching ZTE Corporation, Sanechips, Qualcomm Incorporated CR Rel-15 38.331 15.9.0 1518 2 F NR\_newRAT-Core

* [004] Agreed

[R2-2004469](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004469.zip) CR on SRS-CarrierSwitching ZTE Corporation, Sanechips, Qualcomm Incorporated CR Rel-16 38.331 16.0.0 1602 - A NR\_newRAT-Core

=> Revised in R2-2006108

[R2-2006108](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006108.zip) CR on SRS-CarrierSwitching ZTE Corporation, Sanechips, Qualcomm Incorporated CR Rel-16 38.331 16.0.0 1602 1 A NR\_newRAT-Core

- [004] half-time: Both CRs are expected to be revised

* [004] Agreed

[R2-2006339](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006339.zip) [Draft] LS on NR SRS carrier switching Qualcomm Incorporated LS out Rel-15 To:RAN1

- [004] Chair. Note that we expect reply to close the listed open issues.

* [004] Approved. Final version in R2-2006362

[R2-2005072](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005072.zip) Configuration of SRS Carrier Switching Ericsson discussion Rel-15 NR\_newRAT-Core

* [004] Noted

[R2-2005111](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005111.zip) [DRAFT] Ambiguities related SRS Carrier Switching Ericsson LS out Rel-15 NR\_newRAT-Core To:RAN1

- [004] Half-Time: There was no support to send this LS

* [004] Noted

[R2-2005073](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005073.zip) Corrections to configuration of SRS Carrier Switching Ericsson CR Rel-15 38.331 15.9.0 1646 - F NR\_newRAT-Core

[R2-2005110](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005110.zip) Corrections to configuration of SRS Carrier Switching Ericsson CR Rel-16 38.331 16.0.0 1647 - A NR\_newRAT-Core

* [004] Not pursued

BWP configuration

[R2-2004773](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004773.zip) Clarificaiton on the default BWP configuration Apple CR Rel-15 38.331 15.9.0 1625 - F NR\_newRAT-Core

[R2-2004774](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004774.zip) Clarificaiton on the default BWP configuration Apple CR Rel-16 38.331 16.0.0 1626 - A NR\_newRAT-Core

2 Treated by email [004]

* [004] Both Not pursued

L2 Parameters

* [AT110-e][005][NR15] L2 Parameters (ZTE)

Scope: Treat R2-2004564, R2-2004565, R2-2004566, R2-2004567, R2-2004568, R2-2004770, R2-2004771, (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

Config CSI-RS based CFRA

[R2-2004564](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004564.zip) Presence of ssb-perRACH-Occasion for the CSI-RS based CFRA ZTE Corporation, Sanechips, Samsung discussion Rel-15 NR\_newRAT-Core

* [005] Noted

[005] DISCUSSION Half Time:

- [005] Chairman: the views are somewhat divergent. On Option 1, 2, 3, it seems to me indeed that today there are cases when it is not clear what a UE should do, meaning that the feature doesn’t really work. The proposal to change the presence condition to cond mandatory seems like the simplest change. Whether such change is backwards compatible or not (for a UE) I guess could depend on how UE vendor has interpreted the TS, but if the feature doesn’t work currently, these bugfix CRs will be mandatory for the feature in any case. From the discussion it seems likely to me that no one has deployed this feature. Given this circumstance I am very inclined to go with the rapporteurs Proposal to change the presence cond. I hope this can be acceptable, and companies can compromise.

- [005] RAP: RAN2 continue to discuss in part 2 whether there is need to define a UE capability indicating UE’s support for separate CSI-RS CFRA resource configuration via the field occasions (in which ssb-perRACH-Occasion is configured) and resources (set to csirs) in CFRA in RACH-ConfigDedicated.

* [005] Half time agreement: Change the presence condition of *ssb-perRACH-Occasion* in CFRA into “Cond Mandatory”.

[R2-2004565](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004565.zip) Clarification on the presence of ssb-perRACH-Occasion for the CSI-RS based CFRA-Solution 2 (R15) ZTE Corporation, Sanechips, Samsung CR Rel-15 38.331 15.9.0 1449 2 F NR\_newRAT-Core R2-2002917

[R2-2004566](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004566.zip) Clarification on the presence of ssb-perRACH-Occasion for the CSI-RS based CFRA-Solution 2 (R16) ZTE Corporation, Sanechips, Samsung CR Rel-16 38.331 16.0.0 1614 - F NR\_newRAT-Core

* [005] Both Agreed

[R2-2004567](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004567.zip) Introduction of ssb-perRACH-Occasion-CSI-RS-Solution 3 (R15) ZTE Corporation, Sanechips, Samsung CR Rel-15 38.331 15.9.0 1615 - F NR\_newRAT-Core

[R2-2004568](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004568.zip) Introduction of ssb-perRACH-Occasion-CSI-RS-Solution 3 (R16) ZTE Corporation, Sanechips, Samsung CR Rel-16 38.331 16.0.0 1616 - F NR\_newRAT-Core

* [005] Not pursued

5 Treated by email [005]

LCP restriction

[R2-2004770](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004770.zip) Clarification on the maxPUSCH-Duration for LCP Restriction Apple CR Rel-15 38.331 15.9.0 1623 - F NR\_newRAT-Core

=> Revised in R2-2006246

R2-2006246 Clarification on the maxPUSCH-Duration for LCP Restriction Apple CR Rel-15 38.331 15.9.0 1623 1 F NR\_newRAT-Core

* [005] Agreed

[R2-2004771](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004771.zip) Clarification on the maxPUSCH-Duration for LCP Restriction Apple CR Rel-16 38.331 16.0.0 1624 - A NR\_newRAT-Core

=> Revised in R2-2006247

R2-2006247 Clarification on the maxPUSCH-Duration for LCP Restriction Apple CR Rel-16 38.331 16.0.0 1624 1 A NR\_newRAT-Core

2 Treated by email [005]

* [005] Agreed
* [005] Half time agreement: Clarify that the LCP restriction of *maxPUSCH-Duration* is based on the assumption that all symbols are equal duration and the longer symbol duration for the first symbol should be ignored. Take the CR R2-2004770 and R2-2004771 as a baseline and discuss wording improvement in part 2.

Release of Configuration

* [AT110-e][006][NR15] Release of Configuration (Nokia)

Scope: Treat R2-2004903, R2-2004904, R2-2004905, R2-2005009, R2-2005002, R2-2005003 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

[006] DISCUSSION Half-Time

- [006] Rap: Can continue to Discuss whether to adopt some changes to the RRC guidelines in A.3.9 for the AddModList usage regarding the release of parent/child IEs with nested AddModLists. e.g. “release of parent field also releases all the child fields”.

S1

* [006] RAN2 confirms that UE shall not release the *PDCCH-ConfigCommon*::*commonControlResourceSet* even if the same CORESET ID is included in *PDCCH-Config:: controlResourceSetToReleaseList*.
* [006] RAN2 confirms that release of parent field also releases all of the child fields, regardless of whether they have been added via AddModList or as normal fields.
* [006] RAN2 confirms that it is up to network implementation to release “hanging” fields (i.e. fields referring to other IEs that no longer remain in UE configuration).

S2

* [006] RAN2 confirms that upon receiving sCellToReleaseList with an sCellIndex, UE is required to release only the SCellConfig with the corresponding sCellID.
* [006] RAN2 confirms that, when releasing an SCell via *sCellToReleaseList*, network should release a *CSI-ReportConfig* of the SpCell cell with resources in that SCell.
* [006] It is network responsibility to ensure no “hanging” configurations remain (e.g. UE does not need consider a reconfiguration that keeps a reference to a non-existent SCell as valid).
* [006] Do not capture general requirement to avoid hanging configurations. Clarify observed issues on case-by-case basis based on company contributions.

S3

* [006] Clarify in field description of *uplinkConfig* that release and addition of the field can only be done upon SCell addition or release (respectively).

AddModList release and CORESET and PDCCH TCI state

[R2-2004903](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004903.zip) Corrections to CORESET and PDCCH TCI state release Nokia, Nokia Shanghai Bell discussion Rel-15 NR\_newRAT-Core

* [006] Noted

[R2-2004904](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004904.zip) Corrections to CORESET and PDCCH TCI state release Nokia, Nokia Shanghai Bell CR Rel-15 38.331 15.9.0 1633 - F NR\_newRAT-Core

R2-2006324 Corrections to CORESET and PDCCH TCI state release Nokia, Nokia Shanghai Bell CR Rel-15 38.331 15.9.0 1633 1 F NR\_newRAT-Core

* [006] Agreed

[R2-2004905](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004905.zip) Corrections to CORESET and PDCCH TCI state release Nokia, Nokia Shanghai Bell CR Rel-16 38.331 16.0.0 1634 - A NR\_newRAT-Core

3 Treated by email [006]

[R2-2006325](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006325.zip) Corrections to CORESET and PDCCH TCI state release Nokia, Nokia Shanghai Bell CR Rel-16 38.331 16.0.0 1634 1 A NR\_newRAT-Core

* [006] Agreed

SCell release

[R2-2005009](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005009.zip) Clarification on SCell release Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

* [006] Noted

[R2-2005002](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005002.zip) Clarification on release and addition of the uplink for Scell Huawei, HiSilicon CR Rel-15 38.331 15.9.0 1643 - F NR\_newRAT-Core

=> Revised in R2-2006228

R2-2006228 Clarification on release and addition of the uplink for Scell Huawei, HiSilicon CR Rel-15 38.331 15.9.0 1643 1 F NR\_newRAT-Core

* [006] Agreed

[R2-2005003](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005003.zip) Clarification on release and addition of the uplink for Scell Huawei, HiSilicon CR Rel-16 38.331 16.0.0 1644 - A NR\_newRAT-Core

=> Revised in R2-2006229

R2-2006229 Clarification on release and addition of the uplink for Scell Huawei, HiSilicon CR Rel-16 38.331 16.0.0 1644 1 A NR\_newRAT-Core

3 Treated by email [006]

* [006] Agreed

DC configuration

* [AT110-e][007][NR15] DC Configuration (Apple)

Scope: Treat R2-2005531, R2-2005532, R2-2005533, R2-2005534, R2-2005634, R2-2005635, R2-2004488, R2-2004489 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

[R2-2006186](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006186.zip) Summary of [AT110e][007][NR15] DC Configuration (Apple) Apple discussion NR\_HST

DISCUSSION online

P1

- Ericsson think O2 is consistent with ENDC.

- Ericsson thikn there is no problem with PSCell addition except a description update.

- Ericsson don’t want to add ASN.1 fields for any case.

- MTK think that option 2 requires that SN provides SMTC via internode signalling.

- QC think all WF are ok, has the same concern as Ericsson. Agrees with MTK that EN-DC principels breaks but think also WF2 is ok.

- ZTE think WF2 could be adopted as a compromise. ZTE think that O1 is the only option for SN change so it is needed for R16.

- Huawei think that all companies can accept o2 for R15, but think WF3 is better.

- Intel think SN change is the same as PSCell change fro UE point of view. Intel think we can check if the network issues can be resolved to also have O2 for R16.

- Apple would prefer O1 but think ASN.1 impact is a problem so O2 would be preferred.

- OPPO think this is complex for the UE and suggest no change for R15.

- Samsung prefer WF3, LG as well.

- NEC prefer WF2

P2

- Intel think the text can be simplified and say “not provided”. QC think that in current FD the full condition is spelled out. Intel think that SN change is anyway not possible to discriminate for the UE. Apple agrees and PSCell addition is sufficient

- Oppo agrees w P2

* Option 2 for PSCell addition for R15
* Solution for R16 postponed
* If smtc configuration is absent for PSCell addition, the UE uses the smtc in *measObjectNR* having the same SSB frequency and subcarrier spacing, as configured before the reception of the RRC message.

PSCell Addition NR-DC - SMTC

[R2-2005531](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005531.zip) SMTC Configuration for PSCell Addition for NR-DC Apple, ZTE Corporation, Sanechips, Qualcomm Incorporated CR Rel-15 38.331 15.9.0 1675 - F NR\_newRAT-Core

[R2-2005532](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005532.zip) SMTC Configuration for PSCell Addition for NR-DC Apple, ZTE Corporation, Sanechips, Qualcomm Incorporated CR Rel-16 38.331 16.0.0 1676 - A NR\_newRAT-Core

[R2-2005533](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005533.zip) SMTC Configuration for PSCell Addition for NR-DC Apple, ZTE Corporation, Sanechips, Qualcomm Incorporated CR Rel-15 38.306 15.9.0 0340 - F NR\_newRAT-Core

[R2-2005534](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005534.zip) SMTC Configuration for PSCell Addition for NR-DC Apple, ZTE Corporation, Sanechips, Qualcomm Incorporated CR Rel-16 38.306 16.0.0 0341 - A NR\_newRAT-Core

4 Treated by email [007]

[R2-2006248](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006248.zip) Summary of the offline discussion on SMTC configuration for NR-DC Apple discussion NR\_NewRAT-Core

* Noted

[R2-2006244](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006244.zip) SMTC Configuration for PSCell Addition for NR-DC (Option 2) Apple CR Rel-15 38.331 15.9.0 1706 - F NR\_NewRAT-Core

=> Revised in R2-2006334

[R2-2006334](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006334.zip) SMTC Configuration for PSCell Addition for NR-DC (Option 2) Apple CR Rel-15 38.331 15.9.0 1706 1 F NR\_NewRAT-Core

[R2-2006245](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006245.zip) SMTC Configuration bfor PSCell Addition for NR-DC (Option 2) Apple CR Rel-16 38.331 16.0.0 1707 A NR\_NewRAT-Core

* [007] Both agreed

SCG establishment – MAC default

[R2-2005634](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005634.zip) MAC Default Configuration for SCG Qualcomm Incorporated CR Rel-16 38.331 16.0.0 1685 - A NR\_newRAT-Core

[R2-2005635](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005635.zip) MAC Default Configuration for SCG Qualcomm Incorporated CR Rel-15 38.331 15.9.0 1686 - F NR\_newRAT-Core

2 Treated by email [007]

* Both Not Pursued

DISCUSSION

- QC explains that this is a safeguard if the network omits the MAC configuration.

- Huawei think network will always include this configuration, current TS is ok.

- Ericsson think it is ok to not clarify anything.

- MTK think we don’t clarify UE behaviour for bad network configuration. CATT agrees.

- Intel support the CR.

- Apple propose to minute that in this case the nework shall always provide a configuraition.

* It is R2 understanding that at SCG establishement the network provides the MAC cell group configuration, and does not assume that the UE has applied a default configuration.

Radio bearer config NR-DC NE-DC

[R2-2004488](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004488.zip) Clarification for radioBearerConfig and radioBearerConfig2 vivo discussion

* [007] Noted

[R2-2004489](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004489.zip) Clarification for radioBearerConfig and radioBearerConfig2 vivo CR Rel-15 38.331 15.9.0 1608 - F NR\_newRAT-Core

2 Treated by email [007]

* [007] Not Pursued

**Mobility**

* [AT110-e][008][NR15] Mobility (Huawei)

Scope: Treat R2-2004768, R2-2004769, R2-2005270, R2-2005271, R2-2005703, R2-2005704, R2-2005636, R2-2005637 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

[R2-2006304](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006304.zip) Summary for Offline [008][NR15] Mobility Huawei, HiSilicon

* [008] Noted

RAN-Area

[R2-2004768](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004768.zip) Clarification on the configuration of RAN-AreaConfig Apple CR Rel-15 38.331 15.9.0 1621 - F NR\_newRAT-Core

[R2-2004769](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004769.zip) Clarification on the configuration of RAN-AreaConfig Apple CR Rel-16 38.331 16.0.0 1622 - A NR\_newRAT-Core

2 Treated by email [008]

* [008] Contents is agreed, merged with rapporteur CRs

Mobility from NR T310

[R2-2005270](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005270.zip) T310 handling during mobility from NR Ericsson CR Rel-15 38.331 15.9.0 1661 - F NR\_newRAT-Core

=> Revised in R2-2006347

[R2-2006347](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005270.zip) T310 handling during mobility from NR Ericsson CR Rel-15 38.331 15.9.0 1661 1 F NR\_newRAT-Core

[R2-2005271](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005271.zip) T310 handling during mobility from NR Ericsson CR Rel-16 38.331 16.0.0 1662 - A NR\_newRAT-Core

=> Revised in R2-2006348

[R2-2006348](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006348.zip) T310 handling during mobility from NR Ericsson CR Rel-16 38.331 16.0.0 1662 1 A NR\_newRAT-Core

2 Treated by email [008]

- [008] After agreement was declared, Docomo commented: I have one comment for completeness. Would it be better to update the table in 7.1.1 (Timers)? For the condition of stopping T310, "upon reception of MobilityFromNRCommand" should be added like T390. Chair: Agree with the Docomo comment, ask for a last day revision (this should be non controversial).

* [008] R2-2006347 R2-2006348 Both Agreed

Handover from EN-DC to NR

[R2-2005703](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005703.zip) Correction for handover from EN-DC to NR Huawei, HiSilicon CR Rel-15 38.331 15.9.0 1691 - F NR\_newRAT-Core

[R2-2005704](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005704.zip) Correction for handover from EN-DC to NR Huawei, HiSilicon CR Rel-16 38.331 16.0.0 1692 - A NR\_newRAT-Core

2 Treated by email [008]

* [008] Both Not Pursued

UE Assistance Information after HO

[R2-2005636](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005636.zip) Correction to Resending UEAssistanceInformation upon HO Qualcomm Incorporated CR Rel-16 38.331 16.0.0 1687 - A NR\_newRAT-Core

[R2-2005637](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005637.zip) Correction to Resending UEAssistanceInformation upon HO Qualcomm Incorporated CR Rel-15 38.331 15.9.0 1688 - F NR\_newRAT-Core

* [008] Half-time: Will have these CRs, can consider rewording, continue disc, revised

R2-2006373 Correction to Resending UEAssistanceInformation upon HO Qualcomm Incorporated CR Rel-16 38.331 16.0.0 1687 1 A NR\_newRAT-Core

R2-2006374 Correction to Resending UEAssistanceInformation upon HO Qualcomm Incorporated CR Rel-15 38.331 15.9.0 1688 1 F NR\_newRAT-Core

* [008] Both agreed

**Processing Time & Security**

* [AT110-e][009][NR15] Processing Time and Security (Qualcomm)

Scope: Treat R2-2004448, R2-2004449, R2-2004531, R2-2004532, R2-2004533, R2-2004534, R2-2005636, R2-2005637 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

R2-2006067 [AT109bis-e][009][NR15] Processing Time and Security Qualcomm discussion Rel-15 NR\_newRAT-Core

* [009] Noted, proposals agreed, see below

[R2-2004448](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004448.zip) Clarifying RRC procedure performance requirements Nokia, Nokia Shanghai Bell CR Rel-15 38.331 15.9.0 1597 - F NR\_newRAT-Core

[R2-2004449](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004449.zip) Clarifying RRC procedure performance requirements Nokia, Nokia Shanghai Bell CR Rel-16 38.331 16.0.0 1598 - A NR\_newRAT-Core

2 Treated by email [009]

- [009] RAP: Summary: All companies who responded think the change is not essential, and the CR is making the specifications more confusing than clearer. Some editorial aspects are identified to be helpful but the companies proposing those think they can be done in rapporteur CR.

* [009] Both Not Pursued

[R2-2004531](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004531.zip) Clarification on avoiding keystream repeat due to COUNT reuse Qualcomm Incorporated, Ericsson, Vodafone, NTT DOCOMO CR Rel-15 38.331 15.9.0 1555 1 F NR\_newRAT-Core R2-2003334

=> Revised in R2-2006068

[R2-2006068](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006068.zip) Clarification on avoiding keystream repeat due to COUNT reuse Qualcomm Incorporated, Ericsson, Vodafone, NTT DOCOMO CR Rel-15 38.331 15.9.0 1555 2 F NR\_newRAT-Core

* [009] Agreed

[R2-2004532](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004532.zip) Clarification on avoiding keystream repeat due to COUNT reuse Qualcomm Incorporated, Ericsson, Vodafone, NTT DOCOMO CR Rel-16 38.331 16.0.0 1556 1 A NR\_newRAT-Core R2-2003335

=> Revised in R2-2006069

[R2-2006069](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006069.zip) Clarification on avoiding keystream repeat due to COUNT reuse Qualcomm Incorporated, Ericsson, Vodafone, NTT DOCOMO CR Rel-16 38.331 16.0.0 1556 2 A NR\_newRAT-Core

* [009] Agreed

[R2-2004533](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004533.zip) Clarification on avoiding keystream repeat due to COUNT reuse Qualcomm Incorporated, Ericsson, Vodafone, NTT DOCOMO CR Rel-15 36.331 15.9.0 4257 1 F TEI15 R2-2003336

=> Revised in R2-2006070

[R2-2006070](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006070.zip) Clarification on avoiding keystream repeat due to COUNT reuse Qualcomm Incorporated, Ericsson, Vodafone, NTT DOCOMO CR Rel-15 36.331 15.9.0 4257 2 F TEI15

* [009] Agreed

[R2-2004534](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004534.zip) Clarification on avoiding keystream repeat due to COUNT reuse Qualcomm Incorporated, Ericsson, Vodafone, NTT DOCOMO CR Rel-16 36.331 16.0.0 4258 1 A TEI15 R2-2003337

=> Revised in R2-2006071

[R2-2006071](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006071.zip) Clarification on avoiding keystream repeat due to COUNT reuse Qualcomm Incorporated, Ericsson, Vodafone, NTT DOCOMO CR Rel-16 36.331 16.0.0 4258 2 A TEI15

4 Treated by email [009]

* [009] Agreed

- [009] Halftime RAP: Summary: All companies agree with the intent of the CR, one company prefers this to go in rapp CR. Some minor updates are proposed which the CR authors agree to update.

* [009] Halftime agreement: Will have these CRs, can consider minor updates, expected to be revised

Withdrawn:

R2-2004772 Clarificaiton on the default BWP configuration Apple discussion Rel-15 NR\_newRAT-Core

#### 5.4.1.2 RRM and Measurements and Measurement Coordination

Including late drop.

* [AT110-e][010][NR15] Measurements and System Information (Huawei)

Scope: Treat R2-2004363 R2-2005419, R2-2005420, R2-2005421, R2-2005422, R2-2005392, R2-2005393 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

[R2-2006305](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006305.zip) Summary for Offline [010][NR15] Measurements and System Information Huawei, HiSilicon

* [010] Noted, proposals are agreed, see below.

[R2-2004363](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004363.zip) LS on UE reporting criteria (R4-2005265; contact: Nokia) RAN4 LS in Rel-15 NR\_newRAT-Core To:RAN2

* [010] Not needed

[R2-2005419](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005419.zip) 36331 CR(R15) on inter-RAT SFTD measurements Huawei, HiSilicon, Ericsson, Nokia CR Rel-15 36.331 15.9.0 4285 1 F NR\_newRAT-Core R2-2003734

[R2-2005420](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005420.zip) 36331 CR(R16) on inter-RAT SFTD measurements Huawei, HiSilicon, Ericsson, Nokia CR Rel-16 36.331 16.0.0 4286 1 A NR\_newRAT-Core R2-2003735

2 Treated by email [010]

* [010] Both Not Pursued

[R2-2005421](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005421.zip) 38331 CR(R15) on inter-RAT SFTD measurements Huawei, HiSilicon CR Rel-15 38.331 15.9.0 1578 1 F NR\_newRAT-Core R2-2003701

[R2-2005422](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005422.zip) 38331 CR(R16) on inter-RAT SFTD measurements Huawei, HiSilicon CR Rel-16 38.331 16.0.0 1579 1 A NR\_newRAT-Core R2-2003702

2 Treated by email [010]

* [010] Both Agreed

#### 5.4.1.3 System information

[R2-2005392](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005392.zip) Corrections to SIB1 Processing Samsung Electronics Co., Ltd discussion Rel-15 NR\_newRAT-Core Late

[R2-2005393](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005393.zip) Corrections to SIB1 Processing Samsung Electronics Co., Ltd discussion Rel-16 Late

2 Treated by email [010]

* [010] Half-time agreement: TPs are agreeable, expect CRs for final agreement.

R2-2006047 Corrections to SIB1 Processing Samsung Electronics Co., Ltd CR Rel-15 38.331 15.9.0 1695 F NR\_newRAT-Core

R2-2006065 Corrections to SIB1 Processing Samsung Electronics Co., Ltd CR Rel-16 38.331 16.0.0 1697 F NR\_newRAT-Core, TEI16

* [010] Both agreed

#### 5.4.1.4 Inter-Node RRC messages

* [AT110-e][011][NR15] Inter-Node RRC (Huawei)

Scope: Treat R2-2004337, R2-2005182, R2-2005235, R2-2005236, R2-2005237, R2-2005167, R2-2005168, R2-2005574, R2-2005576, (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

[R2-2006306](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006306.zip) Summary for Offline [011][NR15] Inter-Node RRC Huawei, HiSilicon

DISCUSSION

P1

- Ericsson think there is no issue, and we don’t need to reflect every detail in stage-2. Don’t think this is needed. Nokia agrees with Ericsson, and think this is an implicit part. Nokia think the CR has many modifications. Samsung share the same view, and think this is not a good precedent.

- intel think indeed there is an inconsistency, for the inter-node interface, not applicable for the UE. However not really urgent.

- ZTE think we can postpone.

P2

- Ericsson clarifies that R3 replied that network implementation can solve this issue.

- Ericsson is concerned that Nokias proposal changes current IE meaning. Huawei agree with Ericsson that IE meaning is changed Huawei would prefer to do nothing. Intel also agree we shouldn’t redefine.

- Intel also think R3 LS is vague.

- ZTE think C is ok.

- Chair: several companies seesm fine to do nothing at all.

P3

- Ericsson think several companies are ok to go with option A, this is newly added.

- ZTE support A. NEC are also ok with option A. Samsung support A as well

- Huawei think that there could be interoperability issues. Ericsson think not.

- Huawei want to postpone to next meeting. Nokia don’t agree to postpone

* On P1, no change seems agreeable now.
* On P2, the proposals on the table are not agreeable.
* Add "servFrequenciesMN-NR”, “scellFrequenciesSN-EUTRA” and “scellFrequenciesSN-NR" fields into the list of 11.2.3.

[R2-2004337](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004337.zip) Reply LS on handover without SN configuration query (R3-202832; contact: Huawei) RAN3 LS in Rel-15 NR\_newRAT-Core To:RAN2

[R2-2005182](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005182.zip) Discussion on left issue in Handover without fetching source SN config Nokia, Nokia Shanghai Bell discussion Rel-15 NR\_newRAT-Core

[R2-2005235](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005235.zip) Handover without up to date SN radio bearer configuration Huawei, HiSilicon discussion NR\_newRAT-Core

[R2-2005236](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005236.zip) Correction for handover preparation with SN terminated bearers Huawei, HiSilicon CR Rel-15 37.340 15.8.0 0202 - F NR\_newRAT-Core

[R2-2005237](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005237.zip) Correction for handover preparation with SN terminated bearers Huawei, HiSilicon CR Rel-16 37.340 16.1.0 0203 - F NR\_newRAT-Core

4 Treated by email [011]

[R2-2005167](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005167.zip) Correction to measurement coordination in MR-DC Ericsson CR Rel-15 38.331 15.9.0 1655 - F NR\_newRAT-Core

=> Revised in R2-2006214

R2-2006214 Correction to measurement coordination in MR-DC Ericsson CR Rel-15 38.331 15.9.0 1655 1 F NR\_newRAT-Core

[R2-2005168](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005168.zip) Correction to measurement coordination in MR-DC Ericsson CR Rel-16 38.331 16.0.0 1656 - A NR\_newRAT-Core

=> Revised in R2-2006215

R2-2006215 Correction to measurement coordination in MR-DC Ericsson CR Rel-16 38.331 16.0.0 1656 1 A NR\_newRAT-Core

2 Treated by email [011]

[R2-2005574](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005574.zip) Introduction of p-MaxUE-FR1 in the inter-node message Google Inc. CR Rel-15 36.331 15.9.0 4338 - F NR\_newRAT-Core

[R2-2005576](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005576.zip) Introduction of p-MaxUE-FR1 in the inter-node message Google Inc. CR Rel-16 36.331 16.0.0 4339 - A NR\_newRAT-Core

2 Treated by email [011]

* [011] Both Not Pursued

### 5.4.2 LTE changes related to NR

* [AT110-e][012][NR15] LTE changes related to NR (Nokia)

Scope: Treat all documents under 5.4.2, 5.4.2.0, 5.4.2.1 (proponents are responsible to explain and drive)

Part 1: Agree In-principle agreed CRs, for others: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For others, for agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

R2-2006251 Summary of [AT110e][012][NR15] LTE changes related to NR (Nokia) Nokia discussion Rel-15 NR\_newRAt-Core

* [012] Noted

#### 5.4.2.0 In-principle Agreed CRs

[R2-2004450](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004450.zip) Avoiding security risk for RLC AM bearers during termination point change Nokia, Nokia Shanghai Bell CR Rel-15 38.331 15.9.0 1539 2 F NR\_newRAT-Core R2-2004246

[R2-2004451](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004451.zip) Avoiding security risk for RLC AM bearers during termination point change Nokia, Nokia Shanghai Bell CR Rel-15 36.331 15.9.0 4241 2 F NR\_newRAT-Core R2-2004247

[R2-2004452](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004452.zip) Avoiding security risk for RLC AM bearers during termination point change Nokia, Nokia Shanghai Bell CR Rel-16 38.331 16.0.0 1599 - A NR\_newRAT-Core

[R2-2004453](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004453.zip) Avoiding security risk for RLC AM bearers during termination point change Nokia, Nokia Shanghai Bell CR Rel-16 36.331 16.0.0 4293 - A NR\_newRAT-Core

* [012] 4 CRs agreed

[R2-2004605](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004605.zip) Allowing PDCP version change without handover Ericsson, Intel Corporation CR Rel-16 36.331 16.0.0 4262 2 F NR\_newRAT-Core R2-2004191

* [012] Agreed

[R2-2004606](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004606.zip) Allowing PDCP version change without handover Ericsson, Intel Corporation CR Rel-16 36.306 16.0.0 1754 2 F NR\_newRAT-Core R2-2004192

* [012] Revised to fix cover page (meeting and Date), revision is agreed unseen

[R2-2005583](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005583.zip) UE measurement capability requirements for NR Google Inc. CR Rel-15 36.331 15.9.0 4281 2 F NR\_newRAT-Core R2-2004262

[R2-2005586](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005586.zip) UE measurement capability requirements for NR Google Inc. CR Rel-16 36.331 16.0.0 4289 1 A NR\_newRAT-Core R2-2004263

* [012] Both Agreed

All above Treated by email [012]

#### 5.4.2.1 Other

[R2-2005728](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005728.zip) Reply LS on Calculation of ShortResumeMAC-I (S3-201489; contact: Huawei) SA3 LS in Rel-15 5GS\_Ph1-SEC To:RAN2

No action, proposed noted.

* [012] Noted

[R2-2005195](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005195.zip) Clarification to TTI bundling configuration in NE-DC Nokia, Nokia Shanghai Bell, CMCC, Google Inc. CR Rel-15 36.331 15.9.0 4252 1 F NR\_newRAT-Core R2-2003156 Revised

[R2-2005660](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005660.zip) Clarification to TTI bundling configuration in NE-DC Nokia, Nokia Shanghai Bell, CMCC, Google Inc., vivo CR Rel-15 36.331 15.9.0 4252 2 F NR\_newRAT-Core [R2-2005195](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005195.zip)

[R2-2005196](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005196.zip) Clarification to TTI bundling configuration in NE-DC Nokia, Nokia Shanghai Bell, CMCC, Google Inc. CR Rel-16 36.331 16.0.0 4253 1 A NR\_newRAT-Core R2-2003157 Revised

[R2-2005661](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005661.zip) Clarification to TTI bundling configuration in NE-DC Nokia, Nokia Shanghai Bell, CMCC, Google Inc., vivo CR Rel-16 36.331 16.0.0 4253 2 A NR\_newRAT-Core [R2-2005196](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005196.zip)

* [012] 4 CRs not pursued

[R2-2004766](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004766.zip) Clarification on Pcompensation for IRAT Cell Selection Criterion Apple CR Rel-15 36.304 15.5.0 0791 - F NR\_newRAT-Core

[R2-2004767](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004767.zip) Clarification on Pcompensation for IRAT Cell Selection Criterion Apple CR Rel-16 36.304 16.0.0 0792 - A NR\_newRAT-Core

* [012] 2 CRs not pursued

[R2-2005232](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005232.zip) Clarification on PDCP version change in Rel-15 Huawei, HiSilicon CR Rel-15 36.331 15.9.0 4152 3 F NR\_newRAT-Core R2-2003687

* [012] Not pursued

All above Treated by email [012]

### 5.4.3 UE capabilities and Capability Coordination

#### 5.4.3.0 In-principle Agreed CRs

[R2-2005112](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005112.zip) Ambiguity in fr1-fr2-Add-UE-NR-Capabilities parameter Ericsson, NTT Docomo CR Rel-15 38.331 15.9.0 1648 - F NR\_newRAT-Core

[R2-2005113](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005113.zip) Ambiguity in fr1-fr2-Add-UE-NR-Capabilities parameter Ericsson, NTT Docomo CR Rel-16 38.331 16.0.0 1649 - A NR\_newRAT-Core

* [014] Both agreed

[R2-2005407](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005407.zip) SRS Capability report for SRS only Scell Huawei, HiSilicon CR Rel-15 38.331 15.9.0 1559 2 F NR\_newRAT-Core R2-2004197

[R2-2005408](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005408.zip) SRS Capability report for SRS only Scell Huawei, HiSilicon CR Rel-16 38.331 16.0.0 1560 2 A NR\_newRAT-Core R2-2004198

[R2-2005409](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005409.zip) SRS Capability report for SRS only Scell Huawei, HiSilicon CR Rel-15 38.306 15.9.0 0294 1 F NR\_newRAT-Core R2-2004199

[R2-2005410](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005410.zip) SRS Capability report for SRS only Scell Huawei, HiSilicon CR Rel-16 38.306 16.0.0 0295 1 A NR\_newRAT-Core R2-2004200

* [014] All 4 agreed

[R2-2005395](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005395.zip) Correction to RequestedCapabilityCommon Huawei, HiSilicon CR Rel-15 38.331 15.9.0 1561 1 F NR\_newRAT-Core R2-2003463

[R2-2005396](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005396.zip) Correction to RequestedCapabilityCommon Huawei, HiSilicon CR Rel-16 38.331 16.0.0 1562 1 A NR\_newRAT-Core R2-2003464

* [014] Both agreed

[R2-2004842](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004842.zip) Missing "Optional features without UE radio access capability parameters" Ericsson CR Rel-15 38.306 15.9.0 0317 - F NR\_newRAT-Core

=> Revised in R2-2006236

R2-2006236 Missing "Optional features without UE radio access capability parameters" Ericsson CR Rel-15 38.306 15.9.0 0317 1 F NR\_newRAT-Core

* [014] Agreed

[R2-2004843](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004843.zip) Missing "Optional features without UE radio access capability parameters" Ericsson CR Rel-16 38.306 16.0.0 0318 - A NR\_newRAT-Core

=> Revised in R2-2006237

R2-2006237 Missing "Optional features without UE radio access capability parameters" Ericsson CR Rel-16 38.306 16.0.0 0318 1 A NR\_newRAT-Core

- [014] half-time: there are several comments, 4842 and 4843 need to be revised.

All above Treated by email [014]

* [014] Agreed

#### 5.4.3.1 Other

Including Late Drop.

Including outcome of email discussion [Post109bis-e][064][NR15] XDD FRX differentiation (Qualcomm)

Including outcome of email discussion [Post109bis-e][921][NR15] CRs for FR2 CA Fallback (Apple)

Including outcome of email discussion [Post109bis-e][922][NR15] Default values for UE capability (Nokia)

Including outcome of email discussion [Post109bis-e][923][NR15] clarification on codebook parameters for 2-32 (Huawei)

Including outcome of email discussion [Post109bis-e][924][NR15] unnecessary FRx differentiation (ZTE)

* [AT110-e][014][NR15] UE Cap IPA and email disc last meeting (Nokia)

Scope: Treat all IPA CRs under 5.4.3.0, and from 5.4.3.1: R2-2006021, R2-2006022, R2-2005411, R2-2005412, R2-2005413, R2-2004478, R2-2004479

Part 1: Agree In-principle agreed CRs, for others: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For others, for agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

[R2-2006252](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006252.zip) Summary of [AT110e][014][NR15] UE Cap IPA and email disc last meeting (Nokia) Nokia discussion Rel-15 NR\_newRAT-Core

* [014] Noted, proposals are agreed

**Default values**

Including outcome of email discussion [Post109bis-e][922][NR15] Default values for UE capability (Nokia)

[R2-2004454](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004454.zip) Default values for UE capability Nokia, Nokia Shanghai Bell, NTT Docomo CR Rel-15 38.306 15.9.0 0176 5 F NR\_newRAT-Core R2-2002990 Revised

[R2-2005709](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005709.zip) Default values for UE capability Nokia, Nokia Shanghai Bell, NTT Docomo CR Rel-15 38.306 15.9.0 0176 6 F NR\_newRAT-Core [R2-2004454](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004454.zip) Late

=> Revised in R2-2006021

R2-2006021 Default values for UE capability Nokia, Nokia Shanghai Bell, NTT Docomo CR Rel-15 38.306 15.9.0 0176 7 F NR\_newRAT-Core R2-2004454 Late

* [014] Agreed

[R2-2004455](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004455.zip) Default values for UE capability Nokia, Nokia Shanghai Bell, NTT Docomo CR Rel-16 38.306 16.0.0 0304 - A NR\_newRAT-Core Revised

[R2-2005710](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005710.zip) Default values for UE capability Nokia, Nokia Shanghai Bell, NTT Docomo CR Rel-16 38.306 16.0.0 0304 1 A NR\_newRAT-Core [R2-2004455](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004455.zip) Late

=> Revised in R2-200-6022

R2-2006022 Default values for UE capability Nokia, Nokia Shanghai Bell, NTT Docomo CR Rel-16 38.306 16.0.0 0304 2 A NR\_newRAT-Core R2-2004455 Late

* [014] Agreed

- [014] half time: Revisions ongoing

**Codebook parameters**

Including outcome of email discussion [Post109bis-e][923][NR15] clarification on codebook parameters for 2-32 (Huawei)

[R2-2005411](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005411.zip) Summary of [Post109bis-e][923][NR15] clarification on codebook parameters for 2-32 Huawei, HiSilicon report NR\_newRAT-Core

* [014] Noted

[R2-2005412](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005412.zip) on the capability of Basic CSI feedback (2-32) Huawei, HiSilicon CR Rel-15 38.306 15.9.0 0332 - F NR\_newRAT-Core

[R2-2005413](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005413.zip) on the capability of Basic CSI feedback (2-32) Huawei, HiSilicon CR Rel-16 38.306 16.0.0 0333 - F NR\_newRAT-Core

* [014] Both agreed

**Unnecessary FRx differentiation**

Including outcome of email discussion [Post109bis-e][924][NR15] unnecessary FRx differentiation (ZTE)

[R2-2004478](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004478.zip) Report of [Post109bis-e][924][NR15] Unnecessary FRx differentiation ZTE Corporation discussion Rel-15 NR\_newRAT-Core

* [014] Noted

[R2-2004479](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004479.zip) CR on unnecessary xDD FRx differentiation ZTE Corporation, Sanechips CR Rel-15 38.331 15.9.0 1605 - F NR\_newRAT-Core

[R2-2004480](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004480.zip) CR on unnecessary xDD FRx differentiation ZTE Corporation, Sanechips CR Rel-16 38.331 16.0.0 1606 - F NR\_newRAT-Core

- [014] half time: Revisions ongoing

R2-2006115 CR on unnecessary xDD FRx differentiation ZTE Corporation, Sanechips CR Rel-15 38.306 15.9.0 0352 F NR\_newRAT-Core

R2-2006116 CR on unnecessary xDD FRx differentiation ZTE Corporation, Sanechips CR Rel-16 38.306 16.0.0 0353 F NR\_newRAT-Core

* [014] Both Agreed

**FR2 CA Fallback**

* [AT110-e][015][NR15] UE cap FR2 Fallback (Apple)

Scope: Progress CRs, based on R2-2004754 and R2-2004754

Part 1: Can kick off email discussion to gather more comments on the CRs, awaiting on-line treatment.

Part 2: Technically Endorsed CRs for RP. Deadline: June 10, 0700 UTC

Including outcome of email discussion [Post109bis-e][921][NR15] CRs for FR2 CA Fallback (Apple)

[R2-2005999](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005999.zip) Summary of email discussion [Post109bis-e][921][NR15] CRs for FR2 CA Fallback (Apple) Apple discussion Rel-15 NR\_newRAT-Core

DISCUSSSION on-line W1

1

- Apple explains that we don't have an alternative solution to discuss. Ericsson think we should confirm whether there is interest, but would be ok to base discussion on the CR

2

- Apple think that also the Ericsson proposals to simplify can work. Ericsson think the procedure part don’t really need update, and it is sufficient to clarify in Field descriptions.

- MTK slightly prefer to clarify in the procedure text, because in other parts we indeed specify this level of behaivour in the procedure text. Descriptions only in FD increases the risk of further corrections needed. Intel agrees and think the procedure text will not need to be further updated Ericsson think it is the other way around.

- Samsung thikn clarity is the most important aspect. LG agree with Samsung and MTK. Nokia also agrees.

2c

- Chair: there seems to be not so much interest in removeing the proposed-in-CR changes from procedure text and describe in FD as proposed by Ericsson. Majority of the companies think the current way of capturing (as in the CR) is clearer.

- Ericsson can accept the majority view in this case.

2b

- Apple think yes we need to do 2b. Intel think this can/shall indeed be clarified.

2a

- Ericsson thikn that maybe the list can be resued but the new case need to be explained. Apple think this is already covered in the CR.

General

- Chair ask if we can actually agree the CRs. Ericsson are not ok to agree the CRs but think we stick to the plan for Tech endorsement.

- Chair: The CRs seems now almost technically endorsable.

* Further clarification on field description to *rf-ParametersMRDC-FR2-CA-Fallback and rf-ParametersNR-FR2-CA-*Fallback to clarify that the FR2 fallback in one cell group does not impact the other cell group.

[R2-2004754](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004754.zip) FR2 CA fallback Apple, InterDigital Inc. CR Rel-16 38.331 16.0.0 1620 - F NR\_newRAT-Core

=> Revised in R2-2006285

R2-2006285 FR2 CA fallback Apple, InterDigital Inc. CR Rel-16 38.331 16.0.0 1620 1 F NR\_newRAT-Core

* Tehcnically Endorsed (for final decision at RP)

[R2-2004755](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004755.zip) FR2 CA fallback Apple, InterDigital Inc. CR Rel-16 38.306 16.0.0 0315 - F NR\_newRAT-Core

=> Revised in R2-2006286

R2-2006286 FR2 CA fallback Apple, InterDigital Inc. CR Rel-16 38.306 16.0.0 0315 1 F NR\_newRAT-Core

Above docs to be treated by email, for Tech Endorsement (and further decisions by RP).

* Tehcnically Endorsed (for final decision at RP)

**XDD-FRX Differentiation**

* [AT110-e][016][NR15] UE cap xDD FRx differentiation (Qualcomm)

Part 1: May kick off email discussion to gather more comments, if any, awaiting on-line treatment.

Part 2: Agreed CRs. Approved LS. Deadline: June 10, 0700 UTC

Including outcome of email discussion [Post109bis-e][064][NR15] XDD FRX differentiation (Qualcomm)

[R2-2004439](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004439.zip) Summary of email discussion [Post109bis-e][064][NR15] XDD FRX differentiation Qualcomm Incorporated report Rel-15 NR\_newRAT-Core

To be treated on-line

DISCUSSION On-line W1

- QC reports that there seems to be UE implementations in field that uses 1-a and 1-b

P1

- Oppo wonder if P1 is just for R15. QC think yes. Samsung think this can be applied for Rel-16 as well.

- Huawei support P1 and think it is already a compromise.

- Nokia think 1-a is the right interpretation. Nokia understand that 1-b is a one company proposal. Nokia think 1-b need to be reflected in the procedure text, and while 1-a is clear. QC think that 1-b is the literal interpretation of the text while 1-a is more trying to implement intentions.

- Ericsson could accept this compromise but agree also with Nokia that we could clarify the procedure text.

- ZTE can accept P1 but think 1-a is the way. Hope that for future release there is just one interpretation.

- MTK support P1.

- Oppo agrees P1 is the only way

P3

- Intel wonder if we need to do anything for R15. QC think that for R15 we don’t need to do anything. QC think we can discuss this for Rel-16.

- Oppo are ok to do this for Rel-16.

- Nokia are ok to not do anything for Rel-15 but think we shold inform R1 and R4.

- QC think indeed we need to reply to R1.

- ZTE can accept the majority view, and wonder when we can fix this. Chair think we fix when agreeable solution is available. ZTE think that a tree-approach is the best but should be done ASAP. Oppo think this is not the best way. Oppo think we just need to fix the text. QC think Case 6 is in any case problemstic.

- Docomo think that the main issue is that we per-UE features, and should maybe be per-freq-band, and think this would be much simpler.

- LG agrees, and wonder whether we really need to resolve Case 6 right now, but think we should have one single interpretation in Rel-16.

- QC point out that the per-band signalling will increase the overhead,

- Samsung have some sympathy with LG and docomo. Samsung think case 6 is not urgent

- Huawei wonder if we will have interoperability issues if we say we have one single interpretation, think 1-a and 1-b is needed also for R16. Huawei agrees that case 6 is not urgent, it cannot be tested if we add support for it. Oppo think that the network need to support all interpretations, so a single interpretation in rel-16 is for the UE.

- Ericsson thought that the “single interpretation” is for Case 6. See some values to only have per freq band.

- QC think that single interpretation for Rel-16 if mainly for benefits of the network. Nokia think that once network support 1-a and 1-b there is no additional benefits.

- QC think that the docomo proposal for Rel-16 could be an ok compromise. Nokia agrees.

- Intel think that for Rel-16 we just add the per-band signalling as proposed by Docomo, and think we should agree this now. ZTE think we should not change R1 and R4 decisions, and think it is not clear how the signalling is changed, and think it need to be discussed further.

* To allow the interpretation 1-a and 1-b in the R15 specification.
* To confirm that the UE includes the xDD / FRx capabilities based on the duplex mode(s) and frequency range(s) that the UE “supports”, as opposed to the ones that the UE “reports” according to the UE capability filters. No specification change is necessary to clarify this.
* Don’t’ support additional cases for Rel-15, e.g. “case 6”

Chair: For rel-16, continue the discussion by email, consider the per-band proposal by Docomo. Need to have agreed R15 CR, Reply LS to R1 (and R4).

[R2-2004440](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004440.zip) Correction on UE capabilities with xDD and FRx differentiation Qualcomm Incorporated CR Rel-15 38.306 15.9.0 0303 - F NR\_newRAT-Core

=> Revised in R2-2006278

[R2-2006278](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006278.zip) Correction on UE capabilities with xDD and FRx differentiation Qualcomm Incorporated CR Rel-15 38.306 15.9.0 0303 1 F NR\_newRAT-Core

* [016] Agreed

[R2-2006279](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006279.zip) Correction on UE capabilities with xDD and FRx differentiation Qualcomm Incorporated CR Rel-16 38.306 16.0.0 0362 A NR\_newRAT-Core

* [016] Agreed

[R2-2006280](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006280.zip) DRAFT Reply LS on XDD-FRX Differentiation Qualcomm Incorporated LS out Rel-15 NR\_newRAT-Core To:RAN1 Cc:RAN4

* [016] Approved. Final version in R2-200xxyy

Not Treated

[R2-2005690](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005690.zip) Discussion on XDD-FRX differentiation in UE capability ZTE Corporation, Sanechips discussion Rel-15 NR\_newRAT-Core R2-2003750 Late

[R2-2004574](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004574.zip) XDD/FRX additional Differentiation vivo discussion

[R2-2005691](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005691.zip) CR to 38.306 on XDD-FRX differentiation in UE capability ZTE Corporation, Sanechips CR Rel-15 38.306 15.9.0 0227 2 F NR\_newRAT-Core R2-2003751 Late

[R2-2005692](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005692.zip) CR to 38.331 on XDD-FRX differentiation in UE capability ZTE Corporation, Sanechips CR Rel-15 38.331 15.9.0 1436 2 F NR\_newRAT-Core R2-2003752 Late

[R2-2004575](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004575.zip) CR to XDD/FRX additional Differentiation vivo CR Rel-15 38.306 15.9.0 0313 - F NR\_newRAT-Core

Simultaneous SRS antenna and carrier switching

* [AT110-e][017][NR15] UE cap Simultaneous SRS antenna and carrier switching (Qualcomm)

Scope: Treat R2-2004434, R2-2004435, R2-2005360, R2-2005361, R2-2004971, R2-2005579, R2-2005580 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

[R2-2004435](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004435.zip) Correction on UE capability signalling for simultaneous SRS antenna and carrier switching Qualcomm Incorporated CR Rel-15 36.331 15.9.0 4292 - F TEI15

[R2-2005361](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005361.zip) Correction on UE capability signalling for simultaneous SRS antenna and carrier switching Qualcomm Incorporated CR Rel-16 36.331 16.0.0 4322 - A TEI15

* [017] Both Postponed

[R2-2004971](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004971.zip) Further considerations on the simultaneously SRS carrier switch and antenna switch ZTE Corporation, Sanechips discussion Rel-15

* [017] Noted

[R2-2005579](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005579.zip) Correction on UE capability signalling for simultaneous SRS antenna and carrier switching Huawei, HiSilicon CR Rel-15 38.331 15.9.0 1681 - F NR\_newRAT-Core

=> Revised in R2-2006268

R2-2006268 Correction on UE capability signalling for simultaneous SRS antenna and carrier switching Huawei, HiSilicon CR Rel-15 38.331 15.9.0 1681 1 F NR\_newRAT-Core

=> Revised in R2-2006309

R2-2006309 Correction on UE capability signalling for simultaneous SRS antenna and carrier switching Huawei, HiSilicon CR Rel-15 38.331 15.9.0 1681 2 F NR\_newRAT-Core

* [017] Agreed

[R2-2005580](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005580.zip) Correction on UE capability signalling for simultaneous SRS antenna and carrier switching Huawei, HiSilicon CR Rel-16 38.331 16.0.0 1682 - A NR\_newRAT-Core

=> Revised in R2-2006269

R2-2006269 Correction on UE capability signalling for simultaneous SRS antenna and carrier switching Huawei, HiSilicon CR Rel-16 38.331 16.0.0 1682 1 A NR\_newRAT-Core

=> Revised in R2-2006310

R2-2006310 Correction on UE capability signalling for simultaneous SRS antenna and carrier switching Huawei, HiSilicon CR Rel-16 38.331 16.0.0 1682 2 A NR\_newRAT-Core

* [017] Agreed

R2-2006256 Correction on UE capability signalling for simultaneous SRS antenna and carrier switching Huawei, HiSilicon CR Rel-15 38.306 15.9.0 0359 - F NR\_newRAT-Core

=> Revised in R2-2006298

R2-2006298 Correction on UE capability signalling for simultaneous SRS antenna and carrier switching Huawei, HiSilicon CR Rel-15 38.306 15.9.0 0359 1 F NR\_newRAT-Core

* [017] Agreed

R2-2006257 Correction on UE capability signalling for simultaneous SRS antenna and carrier switching Huawei, HiSilicon CR Rel-16 38.306 16.0.0 0360 - A NR\_newRAT-Core

=> Revised in R2-2006299

R2-2006299 Correction on UE capability signalling for simultaneous SRS antenna and carrier switching Huawei, HiSilicon CR Rel-16 38.306 16.0.0 0360 1 A NR\_newRAT-Core

* [017] Agreed

Not treated:

[R2-2004434](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004434.zip) Correction on UE capability signalling for simultaneous SRS antenna and carrier switching Qualcomm Incorporated CR Rel-15 38.306 15.9.0 0265 1 F NR\_newRAT-Core R2-2002574

[R2-2005360](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005360.zip) Correction on UE capability signalling for simultaneous SRS antenna and carrier switching Qualcomm Incorporated CR Rel-16 38.306 16.0.0 0331 - A NR\_newRAT-Core

**Number of RLC bearers**

* [AT110-e][017A][NR15] UE cap Number of bearers (Qualcomm)

Scope: Treat R2-2004441, R2-2005358, R2-2005359, R2-2004432, R2-2004433, R2-2005004, R2-2005580 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

[017A] DISCUSSION

* [017A] Half time: the maximum number of DRBs configured with PDCP duplication and with RLC entity(ies) associated with a MAC entity is 8
* [017A] Half time: For the minimum requirement on the number of RLC bearers the UE shall support, there is no consensus neither on the need of clarifying it nor on what the actual requirement is.

[R2-2004441](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004441.zip) UE requirement on the number of RLC bearers Qualcomm Incorporated discussion Rel-15 NR\_newRAT-Core

* [017A] Noted

[R2-2005004](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005004.zip) Discussion on minimum UE requirements for the number of RLC bearers Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

* [017A] Noted

[R2-2005358](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005358.zip) Corrections on the number of DRBs and RLC bearers Qualcomm Incorporated, Samsung, Nokia CR Rel-16 38.306 16.0.0 0330 - A NR\_newRAT-Core

=> Revised in R2-2006282

R2-2006282 Corrections on the number of DRBs Qualcomm Incorporated, Samsung, Nokia CR Rel-16 38.306 16.0.0 0330 1 A NR\_newRAT-Core

* [017A] Agreed

[R2-2005359](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005359.zip) Corrections on the number of DRBs and RLC bearers Qualcomm Incorporated, Samsung, Nokia CR Rel-16 36.331 16.0.0 4321 - A TEI15

=> Revised in R2-2006284

R2-2006284 Corrections on the number of DRBs Qualcomm Incorporated, Samsung, Nokia CR Rel-16 36.331 16.0.0 4321 1 A TEI15

* [017A] Agreed

[R2-2004432](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004432.zip) Corrections on the number of DRBs and RLC bearers Qualcomm Incorporated, Samsung, Nokia CR Rel-15 38.306 15.9.0 0262 2 F NR\_newRAT-Core R2-2002571

=> Revised in R2-2006281

R2-2006281 Corrections on the number of DRBs Qualcomm Incorporated, Samsung, Nokia CR Rel-15 38.306 15.9.0 0262 3 F NR\_newRAT-Core

* [017A] Agreed

[R2-2004433](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004433.zip) Corrections on the number of DRBs and RLC bearers Qualcomm Incorporated, Samsung, Nokia CR Rel-15 36.331 15.9.0 4235 2 F TEI15 R2-2002572

=> Revised in R2-2006283

R2-2006283 Corrections on the number of DRBs Qualcomm Incorporated, Samsung, Nokia CR Rel-15 36.331 15.9.0 4235 3 F TEI15

* [017A] Agreed

Not Treated (no need):

[R2-2005005](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005005.zip) Minimum UE requirements for the number of RLC bearers Huawei, HiSilicon CR Rel-15 38.306 15.9.0 0326 - F NR\_newRAT-Core

[R2-2005006](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005006.zip) Minimum UE requirements for the number of RLC bearers Huawei, HiSilicon CR Rel-16 38.306 16.0.0 0327 - A NR\_newRAT-Core

[R2-2005007](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005007.zip) Minimum UE requirements for the number of RLC bearers Huawei, HiSilicon CR Rel-15 36.331 15.9.0 4301 - F NR\_newRAT-Core

[R2-2005008](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005008.zip) Minimum UE requirements for the number of RLC bearers Huawei, HiSilicon CR Rel-16 36.331 16.0.0 4302 - A NR\_newRAT-Core

**NE-DC and NGEN-DC**

* [AT110-e][018][NR15] UE cap NE-DC and NGEN-DC (OPPO)

Scope: Treat R2-2004313, R2-2004470, R2-2004472, R2-2004471, R2-2004473, R2-2004821, R2-2004822, R2-2004396, R2-2004397, R2-2004398, R2-2004399, R2-2004400, R2-2004823, R2-2004405 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

NE-DC only BCs (from 109e)

[R2-2004313](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004313.zip) Reply LS on the applicability of UE capabilities for NE-DC (R1-2002792; contact: ZTE) RAN1 LS in Rel-15 NR\_newRAT-Core To:RAN2

Expect Noted

* [018] Noted

[R2-2004470](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004470.zip) CR on introduction of extended capabilities for NE-DC only BCs ZTE Corporation, Sanechips, OPPO CR Rel-15 38.331 15.9.0 1445 2 F NR\_newRAT-Core R2-2002220

=> Revised in R2-2006328

R2-2006328 CR on introduction of extended capabilities for NE-DC only BCs ZTE Corporation, Sanechips, OPPO CR Rel-15 38.331 15.9.0 1445 3 F NR\_newRAT-Core

* [018] Agreed

[R2-2004472](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004472.zip) CR on introduction of extended capabilities for NE-DC only BCs ZTE Corporation, Sanechips, OPPO CR Rel-16 38.331 16.0.0 1603 - A NR\_newRAT-Core

=> Revised in R2-2006329

R2-2006329 CR on introduction of extended capabilities for NE-DC only BCs ZTE Corporation, Sanechips, OPPO CR Rel-16 38.331 16.0.0 1603 1 A NR\_newRAT-Core

* [018] half time: 2 CRs above revised to address comment by Ericsson and Mediatek
* [018] Agreed

[R2-2004471](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004471.zip) CR on applicability of UE MIMO capabilities for NE-DC ZTE Corporation, Sanechips, OPPO CR Rel-15 38.306 15.9.0 0305 - F NR\_newRAT-Core

[R2-2004473](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004473.zip) CR on applicability of UE MIMO capabilities for NE-DC ZTE Corporation, Sanechips, OPPO CR Rel-16 38.306 16.0.0 0306 - A NR\_newRAT-Core

* [018] Not Pursued (contents is agreeable, but 4397 and 4398 below are agreed instead).

[R2-2004821](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004821.zip) Clarification on L1 features of NGEN-DC and NE-DC OPPO CR Rel-15 36.306 15.8.0 1760 - F NR\_newRAT-Core

[R2-2004822](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004822.zip) Clarification on L1 features of NGEN-DC and NE-DC OPPO CR Rel-16 36.306 16.0.0 1761 - A NR\_newRAT-Core

* [018] Both Agreed

Further Cleanup

[R2-2004396](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004396.zip) Band combination list for NE-DC (Cat-F) OPPO, ZTE Corporation, Sanechips CR Rel-16 38.331 16.0.0 1596 - F NR\_newRAT-Core

- [018] RAP: Can be implemented within mega-CR of R16 UE capability.

- [018] Chair: Cover sheet, “rel-15” is indicated Wrong. If there is no corresponding Rel-15 CR then TEI16 should be added as secondary WI. The CR do not fullfill the requirements to be merged into to the Mega CR (change marks user name etc) Chair suggest to not merge with mega CR.

* [018] Half time: revised

=> Revised in R2-2006205

R2-2006205 Band combination list for NE-DC (Cat-F) OPPO, ZTE Corporation, Sanechips CR Rel-16 38.331 16.0.0 1596 1 F NR\_newRAT-Core, TEI16

* [018] Agreed

[R2-2004399](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004399.zip) Clarification on NGEN-DC and NE-DC support OPPO discussion Rel-15 NR\_newRAT-Core

* [018] Noted

[R2-2004397](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004397.zip) Clarification on L1 features of NGEN-DC and NE-DC OPPO CR Rel-15 38.306 15.9.0 0298 - F NR\_newRAT-Core

[R2-2004398](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004398.zip) Clarification on L1 features of NGEN-DC and NE-DC OPPO CR Rel-16 38.306 16.0.0 0299 - A NR\_newRAT-Core

* [018] Both Agreed

[R2-2004400](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004400.zip) Clarification on L2 features of NGEN-DC and NE-DC OPPO CR Rel-15 38.306 15.9.0 0300 - F NR\_newRAT-Core

[018] COMMENTS TO ADDRESS:

1. For eventA-MeasAndReport: mandatory for NE-DC (from Samsung); clarify that this capability is anyway related to NR MCG (from Ericsson)

2. For intraAndInterF-MeasAndReport: mandatory for NE-DC (from Samsung)

3. For eutra-CGI-Reporting/ nr-CGI-Reporting: remove and leave it to [019] (from Huawei/vivo)

4. For handoverFDD-TDD/ handoverFR1-FR2/ handoverInterF: Add NR-DC for PSCell change (from Samsung/Huawei), editorial change (vivo)

* [018] Half time: Continue Phase-II discussion by revision to address the comment above, and provide shadow CR for Rel-16.

[R2-2004823](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004823.zip) Clarification on L2 and RAN4 features of NGEN-DC and NE-DC OPPO CR Rel-15 36.306 15.8.0 1762 - F NR\_newRAT-Core

* [018] Half time: Revise it by deleting CGI parts and leaving that to [019] for phase-II check, and provide shadow CR for Rel-16.

R2-2006206 Clarification on L2 and RAN4 features of NGEN-DC and NE-DC OPPO CR Rel-15 38.306 15.9.0 0300 1 F NR\_newRAT-Core

R2-2006207 Clarification on L2 and RAN4 features of NGEN-DC and NE-DC OPPO CR Rel-15 36.306 15.8.0 1762 1 F NR\_newRAT-Core

R2-2006199 Clarification on L2 and RAN4 features of NGEN-DC and NE-DC OPPO CR Rel-16 38.306 16.0.0 0357 - A NR\_newRAT-Core

R2-2006200 Clarification on L2 and RAN4 features of NGEN-DC and NE-DC OPPO CR Rel-16 36.306 16.0.0 1774 - A NR\_newRAT-Core

* [018] All 4 Agreed

[R2-2004405](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004405.zip) [Draft] LS on Clarification on RAN4 features of NGEN-DC and NE-DC OPPO LS out Rel-15 NR\_newRAT-Core To:RAN4

[018] DISCUSSION

- Common view is the capability of EN-DC also applies to NGEN-DC, but concern from some companies (QC/Huawei/vivo) on NE-DC so prefer LS to consult RAN4.

- There is no majority view on whether we solve the issue of NE-DC in RAN2 or consult RAN4 via LS.

- Rapporteur’s suggestion: Continue the discussion in Phase-II for NE-DC part:

* [018] Half time: Draft CR to implement NGEN-DC part, can be merged into the revision of R2-2004400 (and its Rel-16 Shadow)
* [018] Half time: Revise LS to address the comment from QC, Final decision (CR directly or LS to RAN4) can be done at the end of phase-II

=> Revised in R2-2006208

[R2-2006208](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006208.zip) [Draft] LS on Clarification on RAN4 features of NGEN-DC and NE-DC OPPO LS out Rel-15 NR\_newRAT-Core To:RAN4

* [018] Approved in R2-2006352

**CGI Reporting**

* [AT110-e][019][NR15] UE cap CGI Reporting (vivo)

Scope: Treat R2-2005618, R2-2005619, R2-2005620, R2-2005621, R2-2005622, R2-2004994, R2-2004995, R2-2004996 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

[019] DISCUSSION Half Time:

* [019] Half time: TS36.306, introduce new UE optional capability (i.e. eutra-CGI-Reporting-NEDC) in NE-DC for ANR configured by LTE towards E-UTRA neighbour cells when UE is configured wherein either MN and SN have different DRX cycles, or on-duration configured by MN does not contain on-duration configured by SN if their DRX cycles are same in Release 16 and FFS for Release 15.
* [019] Half time: In TS38.306, introduce additional UE capabilities (i.e. *eutra-CGI-Reporting- NEDC, eutra-CGI-Reporting- NRDC, nr-CGI-Reporting-NEDC, nr-CGI-Reporting -NRDC*) in NE-DC and NR-DC for ANR configured by NR towards E-UTRA/NR neighbour cells when UE is configured wherein either MN and SN have different DRX cycles, or on-duration configured by MN does not contain on-duration configured by SN if their DRX cycles are same.
* [019] Half time: In TS38.306, update the description of eutra-CGI-Reporting and nr-CGI-Reporting to make it clear that they are applied when MR-DC is not configured
* [019] Half time: Align UE capability Constraint for CGI reporting in TS38.306 with the corresponding description in TS36331.

[R2-2005618](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005618.zip) Introduction of CGI reporting capabilitie vivo discussion

[R2-2004994](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004994.zip) Correction on UE capability constraints vivo discussion

* [019] Both Noted

[R2-2005619](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005619.zip) Introduction of CGI reporting capabilitie vivo CR Rel-16 38.306 16.0.0 0344 - A NR\_newRAT-Core

=> Revised in R2-2006311

R2-2006311 Introduction of CGI reporting capabilitie vivo CR Rel-16 38.306 16.0.0 0344 1 A NR\_newRAT-Core

[R2-2005620](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005620.zip) Introduction of CGI reporting capabilitie vivo CR Rel-15 38.306 15.9.0 0345 - B NR\_newRAT-Core

=> Revised in R2-2006312

R2-2006312 Introduction of CGI reporting capabilitie vivo CR Rel-15 38.306 15.9.0 0345 1 B NR\_newRAT-Core

* [019 Half time: 2 CRS: will have these CRs, revised to differentiate NE-DC and NR-DC cases

[R2-2005621](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005621.zip) Introduction of CGI reporting capabilitie vivo CR Rel-16 36.306 16.0.0 1771 - A NR\_newRAT-Core

=> Revised in R2-2006313

R2-2006313 Introduction of CGI reporting capabilitie vivo CR Rel-16 36.306 16.0.0 1771 1 A NR\_newRAT-Core

* [019] Half time: will have this CR, work on the details.

[R2-2005622](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005622.zip) Introduction of CGI reporting capabilitie vivo CR Rel-15 36.306 15.8.0 1772 - B NR\_newRAT-Core

=> Revised in R2-2006314

[R2-2006314](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006314.zip) Introduction of CGI reporting capabilitie vivo CR Rel-15 36.306 15.8.0 1772 1 B NR\_newRAT-Core

[R2-2004995](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004995.zip) Correction on UE capability constraints vivo CR Rel-16 38.306 16.0.0 0324 - A NR\_newRAT-Core

=> Revised in R2-2006315

[R2-2006315](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006315.zip) Correction on UE capability constraints vivo CR Rel-16 38.306 16.0.0 0324 1 A NR\_newRAT-Core

[R2-2004996](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004996.zip) Correction on UE capability constraints vivo CR Rel-15 38.306 15.9.0 0325 - F NR\_newRAT-Core

=> Revised in R2-2006316

R2-2006316 Correction on UE capability constraints vivo CR Rel-15 38.306 15.9.0 0325 1 F NR\_newRAT-Core

* [019] Half time: 2 CRS: will have these CRs, can work on the details.

[R2-2006317](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006317.zip) Draft LS on UE capability for CGI reporting vivo LS out Rel-15 NR\_newRAT-Core To:RAN4

* [Post110-e][019][NR15] UE cap CGI Reporting (vivo)

Scope: Final agreement of CRs, Approve LS if it is found to be needed. CR technical discussion is expected only for the RRC CRs, other CRs expected only for consistency update if needed

Intended outcome: Agreed CRs, Approved LS

Deadline: Short

**IMS voice**

* [AT110-e][020][NR15] UE cap IMS Voice (Google)

Scope: Treat R2-2005494, R2-2005499, R2-2005535, R2-2005540, R2-2005458, R2-2005459 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

[020] DISCUSSION and DESICIONS

* [020] half-time: Capture IMS voice over split bearer for NR-DC and NE-DC is not supported in the 38.306 CRs.
* [020] half-time: Capture IMS voice over split bearer for NGEN-DC is not supported in the 36.306 CRs.
* [020] half-time: Update the 36.306 CRs to align the wording with 36.331 for the other changes and take other preferred changes into account.

[R2-2006219](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006219.zip) Summary for Offline [020][NR15] UE cap IMS voice Google discussion

* [020] Noted

NR-DC

[R2-2005494](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005494.zip) Introduction of IMS capabilities for NR-DC Google Inc. CR Rel-15 38.306 15.9.0 0338 - F NR\_newRAT-Core

=> Revised in R2-2006222

[R2-2006222](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006222.zip) Clarification on the support of IMS voice over split bearer for NR-DC and NE-DC Google Inc. CR Rel-15 38.306 15.9.0 0338 1 F NR\_newRAT-Core

* [020] Agreed

[R2-2005499](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005499.zip) Introduction of IMS capabilities for NR-DC Google Inc. CR Rel-16 38.306 16.0.0 0339 - A NR\_newRAT-Core

=> Revised in R2-2006223

[R2-2006223](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006223.zip) Clarification on the support of IMS voice over split bearer for NR-DC and NE-DC Google Inc. CR Rel-16 38.306 16.0.0 0339 1 A NR\_newRAT-Core

* [020] Agreed

[R2-2005535](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005535.zip) Introduction of IMS capability for NR-DC Google Inc. CR Rel-15 38.331 15.9.0 1677 - F NR\_newRAT-Core

[R2-2005540](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005540.zip) Introduction of IMS capability for NR-DC Google Inc. CR Rel-16 38.331 16.0.0 1678 - A NR\_newRAT-Core

* [020] Both not pursued

NGEN-DC

[R2-2005458](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005458.zip) Correction to IMS capabilities for NGEN-DC Google Inc. CR Rel-15 36.306 15.8.0 1768 - F NR\_newRAT-Core

=> Revised in R2-2006220

[R2-2006220](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006220.zip) Correction to IMS capabilities for NGEN-DC Google Inc. CR Rel-15 36.306 15.8.0 1768 1 F NR\_newRAT-Core

* [020] Agreed

[R2-2005459](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005459.zip) Correction to IMS capabilities for NGEN-DC Google Inc. CR Rel-16 36.306 16.0.0 1769 - A NR\_newRAT-Core.

=> Revised in R2-2006221

R2-2006221 Correction to IMS capabilities for NGEN-DC Google Inc. CR Rel-16 36.306 16.0.0 1769 1 A NR\_newRAT-Core

* [020] Agreed

**Miscellaneous I**

* [AT110-e][021][NR15] UE cap Miscellaneous I (Qualcomm)

Scope: Treat R2-2005630, R2-2005631, R2-2005632, R2-2005633, R2-2004326, R2-2005577, R2-2005578, R2-2004436, R2-2004437 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

FR1 FR2 Aggregation

[R2-2005630](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005630.zip) UE Capability Enhancement for FR1 FR2 CA and DC Qualcomm Incorporated CR Rel-16 38.331 16.0.0 1683 - A NR\_newRAT-Core

=> Revised in R2-2006061

R2-2006061 UE Capability Enhancement for FR1 FR2 CA and DC Qualcomm Incorporated CR Rel-16 38.331 16.0.0 1683 1 A NR\_newRAT-Core

[R2-2005631](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005631.zip) UE Capability Enhancement for FR1 FR2 CA and DC Qualcomm Incorporated CR Rel-16 38.306 16.0.0 0346 - A NR\_newRAT-Core

=> Revised in R2-2006062

R2-2006062 UE Capability Enhancement for FR1 FR2 CA and DC Qualcomm Incorporated CR Rel-16 38.306 16.0.0 0346 1 A NR\_newRAT-Core

[R2-2005632](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005632.zip) UE Capability Enhancement for FR1 FR2 CA and DC Qualcomm Incorporated CR Rel-15 38.331 15.9.0 1684 - F NR\_newRAT-Core

=> Revised in R2-2006063

R2-2006063 UE Capability Enhancement forFR1 FR2 CA and DC Qualcomm Incorporated CR Rel-15 38.331 15.9.0 1684 1 F NR\_newRAT-Core

[R2-2005633](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005633.zip) UE Capability Enhancement for FR1 FR2 CA and DC Qualcomm Incorporated CR Rel-15 38.306 15.9.0 0347 - F NR\_newRAT-Core

=> Revised in R2-2006064

R2-2006064 UE Capability Enhancement for FR1 FR2 CA and DC Qualcomm Incorporated CR Rel-15 38.306 15.9.0 0347 1 F NR\_newRAT-Core

[021] DISUCSSION on FR1 FR2 CA and DC

- Rap half time: Proceed to part 2 of the offline discussion.

- Rap half time: CRs updated based on the simplification suggested by Ericsson will be reviewed, and applicability to NGEN-DC and NE-DC can be discussed.

* [021] half time 4 CRs, will have these, revised.
* [Post110-e][021][NR15] UE Capability Enhancement for FR1 FR2 CA and DC (Qualcomm)

Scope: Continue the discussion, allow more time to check.

Intended outcome: Agreed CRs 38306 38331 R15 R16

Deadline: Short (for RP)

PDSCH RE mapping patterns

[R2-2004326](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004326.zip) LS on default RE mapping patterns (R1-2002828; contact: Ericsson) RAN1 LS in Rel-15 NR\_newRAT-Core To:RAN2

Expected to be noted

* [021] Noted

[R2-2005577](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005577.zip) Clarification on maximum number of supported PDSCH Resource Element mapping patterns Ericsson CR Rel-15 38.306 15.9.0 0342 - F NR\_newRAT-Core

=> Revised in R2-2006152

R2-2006152 Clarification on maximum number of supported PDSCH Resource Element mapping patterns Ericsson CR Rel-15 38.306 15.9.0 0342 1 F NR\_newRAT-Core

* [021] Agreed

[R2-2005578](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005578.zip) Clarification on maximum number of supported PDSCH Resource Element mapping patterns Ericsson CR Rel-16 38.306 16.0.0 0343 - A NR\_newRAT-Core

=> Revised in R2-2006153

R2-2006153 Clarification on maximum number of supported PDSCH Resource Element mapping patterns Ericsson CR Rel-16 38.306 16.0.0 0343 1 A NR\_newRAT-Core

* [021] Agreed
* [021] half time 2 CRs, will have these, might be revised.

NR-DC (from previous meeting)

[R2-2004436](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004436.zip) Signalling of NR-DC only band combination Qualcomm Incorporated discussion Rel-15 NR\_newRAT-Core

[021] DISCUSSION and DEC

- RAP half time: The offline discussion [023] seems to be converging towards the same direction

* [021] Half time: RAN2 confirms that the current UE capability signalling allows the UE to declare band combinations where NR-DC is supported, but NR CA is not supported.
* [021] Noted

[R2-2004437](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004437.zip) Clarification on supported NR-DC cell grouping Qualcomm Incorporated CR Rel-15 38.306 15.9.0 0264 1 F NR\_newRAT-Core R2-2002579

* [021] Agreed

**Miscellaneous II**

* [AT110-e][022][NR15] UE cap Miscellaneous II (Samsung)

Scope: Treat R2-2004831, R2-2004458, R2-2004459, R2-2005397, R2-2005398 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

xDD differentiation SUL/SDL bands

[R2-2004831](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004831.zip) xDD differentiation of UE capabilities for SUL/SDL bands Samsung discussion Rel-15 NR\_newRAT-Core

* [022] Noted
* [022] half time: RAN2 send LS to RAN4 to ask how per-UE capabilities for SUL/SDL bands can be differentiated on the duplex mode(s) in Rel-15 and Rel-16.

[R2-2006322](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006322.zip) LS on UE capability xDD differentiation for SUL/SDL bands Samsung LS out Rel-15 NR\_newRAT-Core To:RAN4, RAN1

* [022] Approved (this is the final version)

BCS and BW

[R2-2004458](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004458.zip) Clarification on BCS and UE BW capabilities Nokia, Nokia Shanghai Bell discussion Rel-15 NR\_newRAT-Core

[R2-2004459](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004459.zip) Draft LS to RAN4 on clarification on BCS and UE BW capabilities Nokia, Nokia Shanghai Bell LS out Rel-15 NR\_newRAT-Core To:RAN4

* [022] Both Noted
* [022] RAN2 confirm that the current specification is clear i.e. UE capability for channel bandwidths is defined by BCS, channel BWs, and supportedBandwidth altogether.

Serving cell number for ENDC power class

[R2-2006122](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006122.zip) LS on serving cell number for EN-DC power class (R4-2008415; contact: Huawei) Rel-15 NR\_NewRAT-Core RAN2

* [022] Noted

[R2-2005397](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005397.zip) Correction to the serving cell number for ENDC power class Huawei, HiSilicon CR Rel-15 38.306 15.9.0 0287 1 F NR\_newRAT-Core R2-2003461

=> Revised in R2-2006270

R2-2006270 Correction to the serving cell number for ENDC power class Huawei, HiSilicon CR Rel-15 38.306 15.9.0 0287 2 F NR\_newRAT-Core

* [022] Agreed

[R2-2005398](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005398.zip) Correction to the serving cell number for ENDC power class Huawei, HiSilicon CR Rel-16 38.306 16.0.0 0288 1 A NR\_newRAT-Core R2-2003462

=> Revised in R2-2006271

R2-2006271 Correction to the serving cell number for ENDC power class Huawei, HiSilicon CR Rel-16 38.306 16.0.0 0288 2 A NR\_newRAT-Core

* [022] Agreed

DISC

- [022] Half time: RAN2 expect to agree the CRs (i.e. R2-2005397, R2-2005398) when LS from RAN4 is received. Detail wording can be determined based on the RAN4’s final LS.

Miscellaneous III

* [AT110-e][023][NR15] UE cap Miscellaneous III (ZTE)

Scope: Treat R2-2004560, R2-2004561, R2-2004972, R2-2004969, R2-2004970, R2-2004844, R2-2004845 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

[R2-2004560](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004560.zip) Invalidating bandwidth class F for FR1 Nokia, Nokia Shanghai Bell CR Rel-15 38.306 15.9.0 0311 - F NR\_newRAT-Core

[R2-2004561](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004561.zip) Invalidating bandwidth class F for FR1 Nokia, Nokia Shanghai Bell CR Rel-16 38.306 16.0.0 0312 - A NR\_newRAT-Core

* [023] Half time, Will have these CRs, can consider updates

R2-2006253 Invalidating bandwidth class F for FR1 Nokia, Nokia Shanghai Bell CR Rel-15 38.306 15.9.0 0311 1 F NR\_newRAT-Core

R2-2006254 Invalidating bandwidth class F for FR1 Nokia, Nokia Shanghai Bell CR Rel-16 38.306 16.0.0 0312 1 A NR\_newRAT-Core

* [023] Both agreed

[R2-2004972](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004972.zip) Further consideration on the Notes to the FeatureSetCombination ZTE Corporation, Sanechips discussion Rel-15 NR\_newRAT-Core

[023] DISCUSSION

- RAP Half time: Companies share the same view that only when the per BC parameters are consistent among the fallback BCs the UE can put these fallback BCs (e.g. BC A+B, BC A+C and BC B+C) into a supper BC (e.g. BC A+B+C), and on this common understanding no further clarification is needed. Meanwhile, companies also provide views on some per BC level parameters, such as BCS, Bandwidth Class and SRS switch capability, in which companies are encouraged to take more consideration on the interpretation of SRS switch capabilities for the fallback BCs

* [023] Noted
* [023] half time: Ran2 confirms that the UE can report a super BC (e.g. BC A+B+C) even the UE only supports the fallback BCs(e.g. BC A+B, BC A+C and BC B+C), the UE can use this method only when the super BC (e.g. BC A+B+C) is defined in RAN4.

[R2-2004969](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004969.zip) Clarifications on the BandList of the BandCombination ZTE Corporation, Sanechips, OPPO CR Rel-15 38.331 15.9.0 1517 1 F NR\_newRAT-Core R2-2002695

[R2-2004970](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004970.zip) Clarifications on the BandList of the BandCombination ZTE Corporation, Sanechips, OPPO CR Rel-16 38.331 16.0.0 1512 1 F NR\_newRAT-Core R2-2002637

* [023] Both Not pursued (intention seems ok but no need to capture in CR).

[R2-2004844](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004844.zip) Missing UE capability requirements Ericsson CR Rel-15 38.306 15.9.0 0319 - F NR\_newRAT-Core

[R2-2004845](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004845.zip) Missing UE capability requirements Ericsson CR Rel-16 38.306 16.0.0 0320 - A NR\_newRAT-Core

- [023] Rap: All (8) of the companies agree with the modification to the field description of the “supportedROHC-Profiles”, but most companies (5 out of 8) disagree with the motivation in the cover page. For the changes to the conditionally mandatory features in clause 6, all (8) of the companies agree to add “ IMS emergency calls”, but for the other elements, companies have different views. Considering that at least the modification to “supportedROHC-Profiles” and “IMS emergency calls” were agreed by all of the companies, we suggest to proceed these CRs to part 2. During part 2, proponents can try to achieve agreeable CRs based on the comments in Part1.

* [023] half time: will have these 2 CRs, revised acc to comments above.

R2-2006238 Missing UE capability requirements Ericsson CR Rel-15 38.306 15.9.0 0319 1 F NR\_newRAT-Core

R2-2006239 Missing UE capability requirements Ericsson CR Rel-16 38.306 16.0.0 0320 1 A NR\_newRAT-Core

* [023] Both agreed

Withdrawn:

R2-2004394 Band combination list for NE-DC (Cat-F) OPPO CR Rel-15 38.331 15.9.0 1594 - F NR\_newRAT-Core Late

R2-2004395 Band combination list for NE-DC (Cat-A) OPPO CR Rel-16 38.331 16.0.0 1595 - A NR\_newRAT-Core Late

R2-2004431 UE requirement on the number of RLC bearers Qualcomm Incorporated CR Rel-15 38.306 15.9.0 0302 - F NR\_newRAT-Core

R2-2004490 XDD/FRX additional Differentiation vivo discussion

R2-2004491 CR38.306 CR to XDD/FRX additional Differentiation vivo draftCR Rel-15 38.306 15.9.0 B NR\_newRAT-Core

[R2-2005119](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005119.zip) Clarification on maximum number of supported PDSCH Resource Element mapping patterns Ericsson CR Rel-15 38.331 15.9.0 1650 - F NR\_newRAT-Core

[R2-2005120](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005120.zip) Clarification on maximum number of supported PDSCH Resource Element mapping patterns Ericsson CR Rel-16 38.331 16.0.0 1651 - A NR\_newRAT-Core

R2-2005414 Correction on UE capability signalling for simultaneous SRS antenna and carrier switching Huawei, HiSilicon CR Rel-15 38.306 15.9.0 0334 - F NR\_newRAT-Core

R2-2005415 Correction on UE capability signalling for simultaneous SRS antenna and carrier switching Huawei, HiSilicon CR Rel-16 38.306 16.0.0 0335 - A NR\_newRAT-Core

R2-2004456 Invalidating bandwidth class F for FR1 Nokia, Nokia Shanghai Bell CR Rel-15 38.331 15.9.0 1600 - F NR\_newRAT-Core

R2-2004457 Invalidating bandwidth class F for FR1 Nokia, Nokia Shanghai Bell CR Rel-16 38.331 16.0.0 1601 - A NR\_newRAT-Core

### 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.x)

#### 5.4.4.0 In-principle Agreed CRs

#### 5.4.4.1 Other

* [AT110-e][024][NR15] Idle Inactive Mode (Apple)

Scope: Treat all documents under 5.4.4, 5.4.4.0, 5.4.4.1 (proponents are responsible to explain and drive)

Part 1: Decision whether to make corrections or not, identify agreeable corrections. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

Cell Barred

[R2-2004852](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004852.zip) Corrections to cell barred handling Ericsson discussion Rel-15 NR\_newRAT-Core

* [024] Noted

[R2-2005078](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005078.zip) Corrections to cell barred handling Huawei, HiSilicon CR Rel-15 38.304 15.6.0 0154 1 F NR\_newRAT-Core R2-2003339

=> Revised in R2-2006259

[R2-2006259](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006259.zip) Corrections to cell barred handling Huawei, HiSilicon CR Rel-15 38.304 15.6.0 0154 2 F NR\_newRAT-Core

* [024] Agreed

[R2-2005079](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005079.zip) Corrections to cell barred handling Huawei, HiSilicon CR Rel-16 38.304 16.0.0 0155 2 A NR\_newRAT-Core R2-2003773

=> Revised in R2-2006260

[R2-2006260](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006260.zip) Corrections to cell barred handling Huawei, HiSilicon CR Rel-16 38.304 16.0.0 0155 3 A NR\_newRAT-Core

* [024] Agreed

Disc Half time

- [024] 2 above Revised (some change seems to be needed).

Cell selection

[R2-2004752](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004752.zip) Correction on suitable cell definition Apple CR Rel-15 38.304 15.6.0 0162 - F NR\_newRAT-Core

=> Revised in R2-2006249

R2-2006249 Correction on suitable cell definition Apple CR Rel-15 38.304 15.6.0 0162 1 F NR\_newRAT-Core

[R2-2004753](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004753.zip) Correction on suitable cell definition Apple CR Rel-16 38.304 16.0.0 0163 - A NR\_newRAT-Core

=> Revised in R2-2006250

R2-2006250 Correction on suitable cell definition Apple CR Rel-16 38.304 16.0.0 0163 1 A NR\_newRAT-Core

- [024] Half time: The discussion can continue

* [024] Contents is agreeable but editorial, to be merged into 38304 rapporteur CRs at next meeting, these CRs are not agreed.

[R2-2004764](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004764.zip) Clarification on Pcompensation for IRAT Cell Selection Criterion Apple CR Rel-15 38.304 15.6.0 0166 - F NR\_newRAT-Core

[R2-2004765](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004765.zip) Clarification on Pcompensation for IRAT Cell Selection Criterion Apple CR Rel-16 38.304 16.0.0 0167 - A NR\_newRAT-Core

* [024] Both Not Pursued

Cell reselection

[R2-2004762](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004762.zip) Clarification on Mobility State Detection Apple CR Rel-15 38.304 15.6.0 0164 - F NR\_newRAT-Core

[R2-2004763](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004763.zip) Clarification on Mobility State Detection Apple CR Rel-16 38.304 16.0.0 0165 - A NR\_newRAT-Core

* [024] Both Not Pursued

Cell reselection IFREQ

[R2-2005135](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005135.zip) Clarification on the frequencies UE shall evaluate for reselection ZTE Corporation, Sanechips discussion Rel-15 NR\_newRAT-Core

* [024] Noted

[R2-2005136](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005136.zip) Clarification on the frequencies UE shall evaluate for reselection (R15) ZTE Corporation, Sanechips CR Rel-15 38.304 15.6.0 0171 - F NR\_newRAT-Core

[R2-2005137](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005137.zip) Clarification on the frequencies UE shall evaluate for reselection (R16) ZTE Corporation, Sanechips CR Rel-16 38.304 16.0.0 0172 - F NR\_newRAT-Core

* [024] Both Not Pursued

Cell reselection IRAT

[R2-2005431](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005431.zip) Correction on inter-RAT cell (re)selection in RRC\_INACTIVE Samsung Electronics Co., Ltd CR Rel-15 36.304 15.5.0 0800 - F NR\_newRAT-Core

[R2-2005432](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005432.zip) Correction on inter-RAT cell (re)selection in RRC\_INACTIVE Samsung Electronics Co., Ltd CR Rel-16 36.304 16.0.0 0801 - F NR\_newRAT-Core

* [024] Both Not Pursued

Withdrawn:

R2-2004547 Measurement rules for cell re-selection OPPO CR Rel-15 38.304 15.6.0 0160 - F NR\_newRAT-Core

R2-2004548 Measurement rules for cell re-selection OPPO CR Rel-16 38.304 16.0.0 0161 - F NR\_newRAT-Core

## 5.5 Void

# 6 Rel-16 NR Work Items

## 6.0 Rel-16 General

L1 parameters

At last day: R1 has produced an update of L1 parameters (configuration parameters). Question whether to take into account.

* We take into account the L1 parameters update from R1, may postpone things that seems to require discussion (each RRC CR rapporteur need to do that, by email).

Lack of CRs

- Nokia reports that for MPE some companies unreasonably blocks progress on CRs at this meeting. Nokia would like to confirm that even if we don’t have CR at this meeting we can still continue the work, and not stop it based on the argument that release is frozen.

- Ericsson support Nokia

- Chair think that we can continue the work, and that is reasonable.

* R2 will continue work on MPE in Q3.

### 6.0.1 RRC ASN.1 review

Rapporteur documents and Class 2 RIL issues.

Including outcome of email discussion [NR Rel-16] 38331

* [NR Rel-16] 38331 \* (Ericsson)

Scope: This thread is used for management of the ASN.1 review file, update of RIL information, and flagging of RIL issues

* [AT110-e][064][NR16] NR RRC 1 (Ericsson)

Was not used during the meeting

* [Post110-e][064][NR16] Miscellaneous ASN.1 review corrections (Ericsson)

Scope: Update and review and of the rapporteur ASN.1 corrections CR. Conclude on way forward for remaining open Class 2 RILs.

Intended outcome: Agreed Rapporteur ASN.1 corrections CR. Way forward for remaining RILs

Deadline: Short

R2-2006302 [AT110-e][064][NR16] NR RRC 1 (Ericsson) Mail discussion report Ericsson report

* [AT110-e][065][NR16] NR ASN1 1 (Huawei)

Scope: R2-2005260 [38.331][H232] Extension to the contents of items of a list using ToAddMostList in absence of extension markers, R2-2004709 Extension of SearchSpace IE [Z106][I657][I658][I659], [H232][I657][658][I659] SearchSpace: contents, no markers, [I648] resourceToAddModList PUCCH-Resource: contents, no markers, [I656] ControlResourceSet : contents and size, markers, [I649][E266] spatialRelationInfo, PUCCH-SpatialRelationInfo vs PUCCH-SpatialRelationInfoList, [E132] pathlossReferenceRSToAddModList in PUSCH-PowerControl-v16xy, R2-2005626 [H241] Correction to PDCCH configuration Huawei, HiSilicon, R2-2005627 [H242] Correction to DCI formats in SearchSpace Huawei, HiSilicon

Solutions + allocation to CR

Deadline: Wed June 10 0500 UTC

[R2-2006344](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006344.zip) Summary of [AT110-e][065][NR16] NR ASN1 1 (Huawei) Huawei, HiSilicon discussion Rel-16 NR\_eMIMO-Core, NR\_IIOT-Core

* [065] The TP is endorsed, to be taken into account in the RRC Rapporteur Common CR (if RRC Rapporteur prefers to reassign some part that is ok).

[AT110-e][066][NR16] NR ASN1 2 (Intel)

Scope: R2-2005258 [38.331][H230] Extension of a single Need M item to a list of this item, List not ToAddMod [S655] [H005], [R2-2005259](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005259.zip) [38.331][H231] Extending the number of entries of a list not using ToAddMod list, Mechanism to release Rel-16 field I633, I805, I803, I840, H248, I806, I804, I815, I807, I808, I820, I809, I810, I811, I812, I816, I813, I814, I818, S496, R2-2005265 [38.331][H248] Fieds that cannot be released, R2-2005263 [38.331][H246] Usage of presence conditions for SetupRelease structures R2-2005264 [38.331][H247] Missing need codes for absence in presence

Solutions + allocation to CR

Deadline: Wed June 10 0500 UTC

[R2-2006343](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006343.zip) Summary of [AT110-e][066][NR16] NR ASN1 2 (Intel) Intel Corporation (rapporteur) discussion

* [066] The proposals in R2-2006343 are agreed, as summarized below.

|  |
| --- |
| **[066] Agreements Summary:**  1 List extension single element list   1. As a small majority preferred to avoid the addMod list, and that is what is used for other pathloss reference RSs introduced in R16, pathlossReferenceRSs is changed to flat list with SetupRelease. 2. The two lists seems to be independent rather than extension of the original list.  Do not create a non-critical extension.   2.2.1 Extending List not ToAddMod   1. Original TP is acceptable for all.   However, additional changes were needed: 2. to allow the release of the candidateBeamRSListExt using SetupRelease instead of size 0 (as per conclusion of section 2.2.2)   2.2.2 Can a list size 0 be used to release a non-AddMod list?  No conclusion.  The company positions are evenly balanced on whether to also allow size 0 to release the list.   This discussion can continue (later outside of this offline)  2.3.1      “Otherwise the field is absent” in Condition:   1. Corrected the *lte-CRS-PatternList2* field description use the proposed text as the restriction was captured previously. 2. T316: There is discussion ongoing in DCCA WI.  Removed the reference to MCG only and kept just the condition for split SRB1 and SRB3 (text suggestion from Huawei).  To be updated further based on that discussion. 3. Do not use “network may” as it is not in line with what we have used before as also commented by Samsung.  As it is not a “network shall”, there is no mandatory network requirement with the current text (the field descriptions are mainly constraints on when the network is allowed or not allowed to configure) 4. Do not use “if and only if” as there is no condition in these discussions where is a mandatory configuration required by the network (as also mentioned in the point above).   2.3.2      Sub-issue 2: Missing Need node for absence:  No changes are required from this section.  The reasons:   1. Changes to *PDCP-Config, PUSCH-Config, RACH-ConfigCommonTwoStepRA* are not needed as per guidelines on use of Need Code for “absence”. 2. Need code is not need also when the presence condition is Need R as any hanging configuration will be released when the presence condition is met and hence there is no risk of inter-operability.  Hence Need codes are not required for *SRS-Config* and *PhysicalCellGroupConfig*. 3. The conditions in ServingCellConfig are not relevant anymore as they were moved to field descriptions from changes in section 2.3.1 (Annex A)   Remaining issues to discuss (outside of this discussion):   1. Whether it is OK to have divergent need codes. 2. Whether to update the guidelines to also included Need S (and also Need R). 3. Whether any update to guidance is necessary to include not to use this as a quick way to release the configuration but rather network explicitly release it.   2.4 Mechanism to release Rel-16 fields   1. On pusch-PowerControl-v16xy:  use SetupRelease for pusch-PowerControl-v16xy as it has an extension marker.  Even though all the existing fields are Need N, we may introduce a Need M in the future. 2. Defined an IE for all the SetupRelease fields.  RRC rapporteur to update the IE names as required. 3. On discardTimerExt-r16, keep the condition here even with SetupRelease as a RB will never change between SRB and DRB.  Hence there is no issue of having to release the configuration for the absence condition (there are a couple of other ones of this nature). 4. Removed the changes for bap-Address-r16, quantityConfigUTRA-FDD and quantityConfigCLI-r16 |

* [066] The TPs in the annexes of R2-2006343 are endorsed, To be taken into account in RRC CRs of eMIMO, DCCA, URLLC, IIOT and remaning parts in RRC Rapporteur Common CR.
* [AT110-e][067][NR16] NR ASN1 3 (Ericsson)

Scope: Default value I631 E252, Misc Need codes Conditions I630 I655 I662 I663 I665 I841

R2-2004732 Miscellaneous ASN.1 corrections related to I630, I631, I632, I633

Solutions + allocation to CR

Deadline: Wed June 10 0500 UTC

R2-2006301 [AT110-e][067][NR16] NR ASN1 3 (Ericsson) Mail discussion report Ericsson discussion

Agreements [067] (in the emails)

* [067] Conclusion I631: Change to Need R and add in field descr “When the field is not configured, the UE uses the value n1 (see TS 38.214 [19], clause 6.1)”. Capture in URLLC WI CR.
* [067] Conclusion E252: On ASN.1 review recommendation, consider in NR-U short email discussion to introduce e.g. CHOICE structure, to avoid applying a default behaviour upon absence of intraCellGuardBandUL-16 and intraCellGuardBandDL-r16.
* [067] Conclusion I630: Not introduce possibility to use delta signalling for the listed examples.
* [067] Conclusion I665: Add Condition (e.g. SPS-ListOnly: “The field is mandatory present when included in sps-ConfigToAddModList, otherwise the field is absent”. Capture in WI IIOT CR.
* [067] Conclusion I841: Delete “Need M” as proposed. Capture in WI URLLC CR
* [AT110-e][068][NR16] NR ASN1 4 (Lenovo)

Scope: ASN1 Naming A009 H001 E229 E257 E258 N033 S463, ASN1 Structure E228 E230 S656 Q022, R2-2004952 [E228][E230] On grouping similar parameters in PUSCH-Config/PDSCH-Config, Misc I654, S461, N021, R2-2004602 [I654] Adding DL AM RLC extension in NR RRC

Solutions + allocation to CR

Deadline: Wed June 10 0500 UTC

[R2-2006346](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006346.zip) Report from email discussion [AT110-e][068][NR16] NR ASN1 4 Lenovo discussion

Agreements [068]

* [068] (A009): The third occurrence of si-Periodicity shall be changed to posSI-Periodicity and captured in the NR ASN.1 rapporteur CR.
* [068] (H001): Issue is postponed.
* [068] (E229): The field name shall be changed to tci-PresentForDCI-Format1-2-r16 and captured in the URLLC WI CR.
* [068] (E257): The field name shall be changed to channelAccessConfigListForDCI-Format1-1-r16 and captured in the NR-U WI CR.
* [068] (E258): The field name shall be changed to channelAccessConfigListForDCI-Format0-1-r16 and captured in the NR-U WI CR.
* [068] (N033): The issue is postponed.
* [068] (S463): The issue is agreed but no further action is required.
* [068] (E228): The fields in PUSCH-Config shall be re-structured as suggested and captured in the URLLC WI CR. On the naming of the new groups of fields, URLLC WI rapporteur shall coordinate with the interested companies.
* [068] (E230): Agree in-principle to re-structure the fields in PDSCH-Config and continue via email discussion on the details.
* [068] (S656): Issue is rejected.
* [068] (Q022): Change of type of RepetitionSchemeConfig-r16 is agreed but no further action is required.
* [068] (I654): IE DL-AM-RLC-v16xy shall be added as non-critical extension of IE RLC-Config in IE RLC-BearerConfig and captured in the URLLC WI CR.
* [068] (S461): Addition of extension fields to the LoggedMeasurementConfiguration message is agreed but no further action is required.
* [068] (N021): Agree not to add value ‘infinity’ for minSchedulingOffsetPreferenceProhibitTimer-r16.

Rapporteur

[R2-2005318](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005318.zip) 38331 Rel-16 Ph2 ASN.1 review file Ericsson discussion Rel-16 TEI16 Late

[R2-2005319](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005319.zip) RIL list Rel-16 Ph2 ASN.1 review Ericsson discussion Rel-16 TEI16 Late

[R2-2005320](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005320.zip) Miscellaneous ASN.1 review corrections Ericsson CR Rel-16 38.331 16.0.0 1666 - F TEI16 Late

- Revision of this CR is for approval. This CR for continuous review and comments

[R2-2006025](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006025.zip) Flagged RILs, 38331 Rel-16 Ph2 Ericsson discussion Rel-16 TEI16

- RRC Rapporteur explains that these RIL issues will be treated at the meeting. Actions will be taken to ensure this

* Noted.

General

[R2-2005317](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005317.zip) Consolidation of parameter names in RAN1 and RAN2 specifications Ericsson discussion Rel-16 TEI16

- Ericsson explains that in the R1 list there are columns where R2 can fill in IE names.

- Huawei wonder if name changes is forbidden even if we do it later.

- Chair think we could do a clenup activity for he next meeting where wqe really go wide to check. There shouldn’t be too much confusion du to that. Oppo agrees we could wait. Nokia think it can be done, as there will not be a ASN.1 issue.

- LG think this is already on-going. Chair think we should keep consistency.

* We do a coordinated effort in Q3 to fix and improve names.
* For parameter names that R2 have already changed, R2 to send an LS back to R1 with this information before end of this week.

[R2-2006036](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006036.zip) [draft] Reply LS on updated Rel-16 LTE and NR parameter lists LS out to:R1 cc:R3 Ericsson

DISCUSSION online W1

- Rap: Request sent in ASN.1 email discussion thread.

- Huawei wonder if the text is really correct. Ericsson think the first line need to be modified.

- Huawei think we can also warn R1 about further updates before RP after sending the LS.

- Intel think that for LPP there is also the same issue and propose we include LPP.

- Vivo think we need some formal checking.

Chair: Assign this in a new email discussion

Chair: the coversheet looks agreeable, except the comment above. We confirm the intention to send this on Friday. Planned approval Friday.

=> revised

[R2-2006074](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006074.zip) [draft] Reply LS on updated Rel-16 LTE and NR parameter lists LS out to:R1 cc:R3 Ericsson

- [000] Chair: Cover sheet was already agreeable, see above (the comment has been addressed) and in alignment with the plan decided on-line, the spreadsheet now contains the adopted R2 parameter names, so the LS can be considered approved.

* [000] Revised in R2-2006085 (added the attachment)

R2-2006085 Reply LS on updated Rel-16 LTE and NR parameter lists RAN2 LS out Rel-16 LTE\_eMTC5-Core, NB\_IOT\_enh3-Core, LTE\_DL\_MIMO\_EE-Core, LTE\_terr\_bcast-Core, NR\_2step\_RACH-Core, NR\_unlic-Core, NR\_IAB-Core, 5G\_V2X\_NRSL-Core, NR\_L1enh\_URLLC-Core, NR\_IIOT-Core, NR\_eMIMO-Core, NR\_UE\_pow\_sav-Core, NR\_pos-Core, NR\_Mob\_enh-Core, LTE\_NR\_DC\_CA\_ To:RAN1 Cc:RAN3

=> Approved

[R2-2006037](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006037.zip) RAN1 parameter list with ASN.1 names for Rel-16 NR Ericsson

- [000] Chair: this is the version that RRC CR rapporteurs has updated during the week 1 of current meeting and it has been merged by the RRC TS Rapporteur. We can consider that even though the review has not been meeting-wide, the quality is expected good and the status is the best possible at current point in time. However, further updates may happen as the ASN.1 review is not finished yet.

* [000] R2 additions are endorsed for now (June 5, implicitly). The parameter names that R2 added in the spreadsheet has been adopted and endorsed separately for each WI (in the CRs development), but may still change as ASN.1 review has not completely finished.

R2-2006038 RAN1 parameter list with ASN.1 names for Rel-16 LTE Ericsson discussion Rel-16 LTE\_eMTC5-Core, NB\_IOT\_enh3-Core, LTE\_DL\_MIMO\_EE-Core, LTE\_terr\_bcast-Core

[R2-2005450](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005450.zip) Early Release Support of Features CMCC discussion Rel-16

DISCUSSION

- OPPO wonder if the target is R16 WIs or something else. CMCC think this is a general discussion, relating e.g. to R15 features, e.g. a R15 UE can implement R16 features. Oppo think it would be good to have a concrete example, we usually decide case by case. CMCC are ok to do some case-by-case work but think that general principles need to be in place to make it easy, e.g. NB should not check and make conclusions based on UE release.

- Huawei think this need to be considered case by case but also think general guidelines are needed, and now for Rel-16 this would be important, we have something for LTE.

- Ericsson wonder what such a guideline would look like. Samsung explains that in LTE we have specified what the network can assume w.r.t. the UEs capability for signalling. Samsung think we anyway need case by case handling.

- CMCC think we can discuss offline.

- Intel think we can copy the LTE guidelines to NR but not much more. Most of issues are implementation. Docomo agrees that LTE can be a baseline in this, .

- On P2 ZTE think that network anyway don’t cross-check UE caps and UE release, and are wondering what the problem is. CMCC has seen issues in field. Nokia agrees with Intel docomo and ZTE. Nokia think it would be helpful to know details about the issues. LG also think we could do something base on LTE.

- MTK think that the general case is usually strange but case by case it may make sense.

- QC think we introduced annex C for R5 and they must be able to test, also for early implementable features.

- Huawei think LTE can be a start but not sure

* We make an attempt to have some guideline for NR, based on current LTE guideline. Invite for contributions next meeting.

[R2-2005628](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005628.zip) Analysis of cross-WI configurability Huawei, HiSilicon discussion Rel-16 NR\_IAB-Core, NR\_IIOT-Core, NR\_Mob\_enh-Core, NR\_L1enh\_URLLC-Core, LTE\_NR\_DC\_CA\_enh-Core Late

DISCUSSION

- LG are somewhat negative.

- QC think we should do this, but this is not only a R2 work.

- Oppo wonder what is the impact to TS.

- Ericsson think there might be some organizational complexity. The current case by case proponent driven approach is very simple. MTK agrees.

- Samsung think the combinations are intuitive and think we don’t need to do anything in standards. Nokia agrees, we assume that everything work together, and then we resolve issues when we find limitations, agrees that case by case is simple.

- Apple also think we should just fix issues case by case.

- vivo think we can resolve this is several ways but always need to discuss case by case,

- Intel also think case by case should be used.

- Huawei think we need special attention on URLLC as it is assumed as baseline for many use cases with other WI.

* Some interest, but not sufficient.

Multi-WI TDRA

* [AT110-e][075][NR16] Conflicting Configurations (Huawei)

Scope: Treat R2-2006057 (R1 Reply LS on conflicting configurations), R2-2004905 (H003), R2-2005262 (H245), R2-2005261 (H244), possibly other related papers (e.g. for URLLC, NR-U, eMIMO)

Intended outcome: Determine Impact R1 reply LS, Treat Related documents, Agree solutions.

Deadline: Wed June 10 0500 UTC

R2-2006057 Reply LS on Conflicting configurations (R1-2004808; contact: Huawei) RAN1 LS in Rel-16 NR\_L1enh\_URLLC-Core, NR\_eMIMO-Core, NR\_unlic-Core To:RAN2

[R2-2004951](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004951.zip) [H003] On merging uplink TDRA into one IE Ericsson draftCR Rel-16 38.331 16.0.0 NR\_unlic-Core, NR\_L1enh\_URLLC-Core

* [75] Both noted

[R2-2006345](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006345.zip) Summary of [AT110-e][075][NR16] Conflicting Configurations (Huawei) Huawei, HiSilicon discussion Rel-16 NR\_L1enh\_URLLC-Core, NR\_eMIMO-Core, NR\_unlic-Core

* [075] Noted

[R2-2005262](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005262.zip) [38.331][H245] TP for PUSCH-TimeDomainResourceAllocationList Huawei, HiSilicon discussion Rel-16 NR\_L1enh\_URLLC-Core, NR\_unlic-Core Late

- Huawei explains that this document resolves the same thing.

- QC think we should wait for R1. Huawei don’t think this is related to enabling the features at the same time. We should do this in any case.

- Ericsson think that in any case we don’t need to have configuration issues in R2.

- Nokia wonder which TS version this is. Ericsson explains that it is based on a ASN.1 intermediate version. Nokia would be ok to do this.

- Ericsson think we asked R1 both about UL and DL.

- Early, Chair: We assume we go this way, wait for R1 reply for final decision (in case there are issues).

- SEE ALSO TP HEREIN

* [075] Define a single PUSCH-TimeDomainResourceAllocationList-r16 which can be used in all cases in Rel-16 and capture the relevant restrictions (so that it is functionnally equivalent to the two structures).

[R2-2005261](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005261.zip) [38.331][H244] TP for PDSCH-TimeDomainResourceAllocationList Huawei, HiSilicon discussion Rel-16 NR\_eMIMO-Core, NR\_L1enh\_URLLC-Core Late

- Nokia think the lesser compatibility will trigger more full configs and are not sure this is the best way.

- Chair: can think about this for a cpl of days or so

- SEE ALSO TP HEREIN

* [075] Define a *-r16* version of the *PDSCH-TimeDomainResourceAllocationList* IE with all the legacy fields, the new field and extension markers.
* [075] The network does not configure simultaneously the field with the legacy version and the -r16 version.
* [075] The -r16 version is also used for DCI format 1-2 and conditions capture which field cannot be used for DCI format 1-2.
* ̈[075] Mandatory fields of *PDSCH-TimeDomainResourceAllocation* are optional in *PDSCH-TimeDomainResourceAllocation-r16* with a condition indicating that they are present in this version of 38.331.

Multi WI FailureType

Email [064]

[R2-2005176](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005176.zip) [E207,E206,E239] Correction to failureType handling in NR Ericsson draftCR Rel-16 38.331 16.0.0 F NR\_SON\_MDT-Core, NR\_IAB-Core, NR\_unlic-Core Late

- LG think it is possible to use the R15 failure types with the new one.

- Samsung think the same problem is there in LTE, could configure behaviour. Samsung wonder why there is different behaviour between NR and LTE. ZTE think NB ca decode both new and old type so we don’t need any new “other” type, in LTE we just introduce a new IE.

- Huawei think we need to align suffixes. –r16

- QC wonder if EUTRA extension was deliberate.

- Ericsson think this shall be supported both for NR-DC and NE-DC. QC think e.g. LBT failure is not applicable for the EUTRA leg.

- Chair: can think about this for a cpl of days or so

- Samsung think that for LTE we already assigned an email discussion for this.

* Treat first in the same email discussion as LTE [206]

Week 2

- Report: After [206] The CR is now aligned with LTE. Ericsson think it is endorsable as it is and suggest to merge with ASN1 Common CR.

- Lenovo wonder if for NR we’d use non-critical extention and remove the reference to Failure type Ext. Ericsson think we might need to look at that.

- Intel wonder what was the conclusion of the Lenovo comment. Ericsson think we need to discuss.

* Discuss how to extend (align with LTE), Endorse the draftCR in [064], merge with ASN.1 common CR.

MCG Failure Type

- Ericsson report that in LTE session they decided to make the failure type optional, and Ericsson think NR should follow. Samsung agrees.

- Ericsson think that this shall go into a DCCA CR.

- Samsung explains the reasoning for the optional failure type. Intel think that MCG failure should follow the same principle for extension.

- DCCA rapporteur think this doesn’t need to be aligned between SCG and MCG failures.

- Can consider to move the LTe change to DCCA CR as well (for consistency)

* Add the topic of MCG FailureType into the DCCA RRC email discussion (choose option, to what extent to align with LTE)

[R2-2005130](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005130.zip) [B108][IAB][SON] TP for failure type in SCGFailurinformation message Lenovo, Motorola Mobility discussion Rel-16

- Covered already

* noted

Multi WI RLF report

[R2-2005177](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005177.zip) [E039] Correction of RLF report upon MCG RLF Ericsson draftCR Rel-16 38.331 16.0.0 F NR\_SON\_MDT-Core, NR\_IAB-Core, NR\_unlic-Core Late

- MTK support the proposal

- LG wonder if there is interaction with DAPS (NR mobility).

- CATT think this need to be moved to SONMDT and there is a CR there as well. Nokia agrees.

- CATT think RLF report should be built also when RRC reestablishment is not triggered and for the case when security was not activated at RLF. Samsung think that RLF report shall not be collected when AS security has not been activated. CATT think there is one more case.

- Chair think a difference is that in the previous text you build RLF report even if there is no Re-establishment.

- Huawei think there is overlap with RIL issue 169 167,

- QC think that there is one case for T316 expiry when this information is not built. For thie case the current text is better.

- Ericsson proposed that this is allocated to SONMDT CR

- Chair think that the CR don’t need to refer to NR\_IAB-Core, NR\_unlic-Core

* We assume that we don’t need to move the text
* RLF report shall not be stored for RLF before security activation
* RLF report shall not be stored for RLF that triggers the MCG Failure procedure (can be revisited if needed in the SONMDT session)
* To be implemented in the SONMDT CR

List extension single element list

Email [066]

R2-2005258 [38.331][H230] Extension of a single Need M item to a list of this item Huawei, HiSilicon discussion Rel-16 NR\_eMIMO-Core Late

List size extension not ToAddMod

Email [066]

[R2-2005259](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005259.zip) [38.331][H231] Extending the number of entries of a list not using ToAddMod list Huawei, HiSilicon discussion Rel-16 NR\_eMIMO-Core Late

Extension to the contents of items of a list using ToAddMostList

Email [065]

[R2-2005260](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005260.zip) [38.331][H232] Extension to the contents of items of a list using ToAddMostList in absence of extension markers Huawei, HiSilicon discussion Rel-16 NR\_eMIMO-Core Late

DISCUSSION

- MTK think the search space is exceptional as we can configure both legacy and R16 lists which should not be broken. There are also other papers on this

- Huawei: Search space is used also not in addmodlist, and extended differently depending on how it is used.

- Nokia assumes that when we do critical extension, we only further maintain the last ext. Nokia think critical extensions increases the risk for full config

- Intel think critical extensions brings more work and think it should ony be used when non-critial extensions are not possible. Samsung agrees and think it should be possible here. Vivo agrees.

- Huawei think it is possible to do a TP with non-critical extension. Think it may be difficult when size and contens is changed.

- Ericsson agress and think critical extensions can be considered when Field descriptions get too complex.

- Huawei wonder if this should apply also to cases when List size changes I.e. when ID range changes.

- Nokia think in legacy we had rules that the old was used when the old range was applicable and the new one used when new range need to be used. Chair think then we need to maintain both, Samsung confirm this was default approach in LTE and we then need to maintain both.

- Huawei think that a difference is that in NR we used the (addmod) list a lot more.

- Huawei think there are at least two lists for which we increase the size in R16.

- Ericsson comments that this list extension is mainly in current spec for SI, have instead used so far the “…” a lot more in NR than in LTE. Intel agrees and think NR is not very efficient.

* Assumption: In general try to avoid critical ext = non-use/replacement of old IEs (as before)
* Assumption: For list size changes, assume same approach as in LTE (new parallel list, use the new list only for the new indexes in the extended list).

- Huawei will provide a TP and discuss on [065]

Mechanism to release Rel-16 field

Email [066]

[R2-2005265](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005265.zip) [38.331][H248] Fieds that cannot be released Huawei, HiSilicon discussion Rel-16 NR\_2step\_RACH-Core, NR\_L1enh\_URLLC-Core, NR\_IIOT-Core, NR\_unlic-Core, NR\_eMIMO-Core Late

“Otherwise the field is absent" in Condition

Email [066]

[R2-2005263](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005263.zip) [38.331][H246] Usage of presence conditions for SetupRelease structures Huawei, HiSilicon discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core, NR\_eMIMO-Core Late

DISCUSSION

- Intel think we should not adopt UE aut reelase, P1 from R2-2004732 is proposed. MTK agrees and think this should be a network behaviour and UE aut release is not to be used. Samsung agrees that FD text makes sense.

- Vivo think the Intel proposal could be acceptable for now.

- Hawei think the intel proposal would work

* noted

[R2-2005264](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005264.zip) [38.331][H247] Missing need codes for absence in presence conditions Huawei, HiSilicon discussion Rel-16 NR\_2step\_RACH-Core, NR\_IIOT-Core, NR\_eMIMO-Core, NR\_L1enh\_URLLC-Core, LTE\_NR\_DC\_CA\_enh-Core Late

Default value I631 E252

Email [067]

[R2-2004732](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004732.zip) Miscellaneous ASN.1 corrections related to I630, I631, I632, I633 Intel Corporation discussion Rel-16 Late

* Remove conditional presence for SetupRelease fields and move the intended network behaviour to field description.

Misc Need codes Conditions I630 I655 I662 I663 I665 I841

Email [067]

ASN1 Naming A009 H001 E229 E257 E258 N033 S463

Email [068]

ASN1 Structure E228 E230 S656 E230 E228

Email [068]

[R2-2004952](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004952.zip) [E228][E230] On grouping similar parameters in PUSCH-Config/PDSCH-Config Ericsson draftCR Rel-16 38.331 16.0.0 NR\_L1enh\_URLLC-Core Late

PDCCH-Config, SearchSpace

Email [065]

[R2-2005626](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005626.zip) [H241] Correction to PDCCH configuration Huawei, HiSilicon draftCR Rel-16 38.331 16.0.0 F NR\_IAB-Core, NR\_UE\_pow\_sav-Core Late

- Nokia think we don’t need to optimize so strongly for size

- The intention is to save corset ID and optionality bits.

- Ericsson wonder if we need these extensions to be available in SI.

- Huawei explains that we need to support more DCI formats.

- Vivo think the specifc optimization is not needed. We should wait for R1. Huawei think it ir celar that at least updated 2-5 is required.

- Nokia think the extension without using ID may have the oppsite effect than desired.

- Vivo think we can go with Option 2

- MTK think we should keep a common way to extend, leaning towards option 1

- Intel think majority want to go with option 1. Samsung agrees, the reuse is more and there is no real problem with it. Nokia agrees as well.

* Go with Option 1

[R2-2004709](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004709.zip) Extension of SearchSpace IE [Z106][I657][I658][I659] MediaTek Inc. discussion Rel-16

[R2-2005627](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005627.zip) [H242] Correction to DCI formats in SearchSpace Huawei, HiSilicon draftCR Rel-16 38.331 16.0.0 F NR\_IAB-Core, 5G\_V2X\_NRSL-Core Late

Misc

Email [068]

[R2-2004602](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004602.zip) [I654] Adding DL AM RLC extension in NR RRC Lenovo, Motorola Mobility, Intel Corporation discussion Rel-16 NR\_L1enh\_URLLC-Core

R16 corrections to R15 (TEI)

* [AT110-e][076][TEI16] R16 corrections to R15 (ZTE)

Scope: Treat R2-2004925 – 4929

Wanted Outcome: determine agreeable parts. For agreeable parts: agreed CRs (don’t need to be merged)

Deadline: EOM

Concluding remarks

- [076] Chair: There seems to be a common understanding there is indeed a problem with the R15 TS on Allowing different classes of UEs to make choice Delay Tolerant Service (options a b c in SA1 TS) in Network Sharing scenarios. The issue may apply also to eLTE (same ASN.1).

- [076] Chair: There are requests for further time to check wheter to also correct R15, and which solution that is easiest to introduce.

[R2-2004925](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004925.zip) [Z118] Clarification on providing network specific uac-AccessCategory1-SelectionAssistanceInfo ZTE Corporation, Sanechips, CMCC, Nokia discussion Rel-16 NR\_newRAT-Core R2-2002764

[R2-2004926](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004926.zip) [Z118] CR on providing network specific uac-AccessCategory1-SelectionAssistanceInfo-Option 1 ZTE Corporation, Sanechips, Nokia CR Rel-16 38.331 16.0.0 1637 - F NR\_newRAT-Core

[R2-2004927](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004927.zip) [Z118] CR on providing network specific uac-AccessCategory1-SelectionAssistanceInfo-Option 2 ZTE Corporation, Sanechips, Nokia CR Rel-16 38.331 16.0.0 1638 - F NR\_newRAT-Core

[R2-2004928](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004928.zip) [Z118] CR on providing network specific uac-AccessCategory1-SelectionAssistanceInfo-Option 3 ZTE Corporation, Sanechips, Nokia CR Rel-16 38.331 16.0.0 1639 - F NR\_newRAT-Core

[R2-2004929](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004929.zip) [Z118] CR on providing network specific uac-AccessCategory1-SelectionAssistanceInfo-Option 4 ZTE Corporation, Sanechips, Nokia CR Rel-16 38.331 16.0.0 1520 2 F NR\_newRAT-Core R2-2002765

* [076] Postponed

Other

[R2-2006011](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006011.zip) Releasing Rel-16 configurations when handover to Rel-15 cells Huawei, HiSilicon discussion Rel-16 NR\_IAB-Core, NR\_IIOT-Core, NR\_Mob\_enh-Core, NR\_L1enh\_URLLC-Core, LTE\_NR\_DC\_CA\_enh-Core

DISCUSSION

- Intel think we have had this for long time, and we could indeed look at solutions but for Rel-17, now is too late. QC agrees. Vivo agrees.

- QC wonder what is the additional delay. UE processing delay is similar in fulkl config and detla config case.

- Nokia think we need to understand more, and think now is too late. Ericsson agrees.

- Huawei think that URLLC service continuity and data loss warrant actions now and cannot be fixed later.

* Assume this is not for Rel-16

RIL PropReject by RRC Rapporteur

R2-2005717 [B200] Using Extension Addition Group in SIB Lenovo, Motorola Mobility discussion Rel-16 NG\_RAN\_PRN-Core

Withdrawn:

R2-2004993 [H249] Discuission on the ASN.1 of inter-dependent field values Huawei, HiSilicon discussion Rel-16 NR\_pos-Core, NR\_unlic-Core

### 6.0.2 Feature List and UE capabilities

Coordination by Intel. Including outcome of email discussion [Post109bis-e][963][NR16] UE Capabilities (Intel, NTT Docomo)

* [AT110-e][963][NR16] UE Capabilities (Intel, NTT Docomo)

Scope: The Main NR UE caps Email Thread for R2 110-e.

Follows the plan in R2-2006020. Relevant tdocs can be treated here

Deadlines: See R2-2006020 and Rapporteur announcements.

Continues in:

* [Post110-e][963][NR16] UE Capabilities (Intel, NTT Docomo)

Scope: The Main NR UE caps Email Thread for R2 110-e.

Follows the plan in R2-2006020.

Intended outcome: Agreed R16 CRs on UE capabilities 38306 38331. Report for information explaining the status and omitted parts.

Deadline (this is an exception case): Wed June 24 (at the very latest)

DISCUSSION

- Huawei think V2X Caps should be discussed separately, and possibly also separate for Uu and PC5 cap exchange.

- Docomo think indeed this could be discussed separately, in particular the procedures should not be discussed in general. Oppo think indeed that the NR controlled LTE V2X and the LTE controlled V2X brings some complexity. Oppo think the V2X UE caps also R1 and R4 can be separate.

- Ericsson think one email discussion is enough. Ericsson think V2X clashes with general UE caps and coordination will be worse if this is separate. Oppo would like to know the details. Ericsson think that the knowledge of the UE cap framework is low in the V2X session. Huawei think the workload need to be considered as well. Samsung agrees with Ericsson.

- Docomo indicate that R1 maturity is low, and currently only 2 features are not FFS.

* We can consider to treat aspects of the V2X UE capabilities R1 R4 separately, in V2X session (details by rapporteurs).

LS in R1

[R2-2004358](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004358.zip) LS on Rel-16 RAN1 UE features lists for NR (R1-2003072; contact: NTT DOCOMO, AT&T) RAN1 LS in Rel-16 NR\_2step\_RACH-Core, NR\_unlic-Core, NR\_IAB-Core, 5G\_V2X\_NRSL-Core, NR\_L1enh\_URLLC-Core, NR\_IIOT-Core, NR\_eMIMO-Core, NR\_UE\_pow\_sav-Core, NR\_pos-Core, NR\_Mob\_enh-Core, LTE\_NR\_DC\_CA\_enh-Core, TEI16, NR\_CLI\_RIM-Core To:RAN2, RAN4

- This LS was taken into account already in input email discussion 963

* Noted

R2-2006097 LS on updated Rel-16 RAN1 UE features lists for NR (R1-2004969; contact: NTT DOCOMO, AT&T) RAN1 LS in Rel-16 NR\_2step\_RACH-Core, NR\_unlic-Core, NR\_IAB-Core, 5G\_V2X\_NRSL-Core, NR\_L1enh\_URLLC-Core, NR\_IIOT-Core, NR\_eMIMO-Core, NR\_UE\_pow\_sav-Core, NR\_pos-Core, NR\_Mob\_enh-Core, LTE\_NR\_DC\_CA\_enh-Core, TEI-16, NR\_CLI\_RIM-Core To:RAN2, RAN4

=> withdrawn

R2-2006119 LS on updated Rel-16 RAN1 UE features lists for NR (R1-2004969; contact: NTT DOCOMO, AT&T) RAN1 LS in Rel-16 NR\_2step\_RACH-Core, NR\_unlic-Core, NR\_IAB-Core, 5G\_V2X\_NRSL-Core, NR\_L1enh\_URLLC-Core, NR\_IIOT-Core, NR\_eMIMO-Core, NR\_UE\_pow\_sav-Core, NR\_pos-Core, NR\_Mob\_enh-Core, LTE\_NR\_DC\_CA\_enh-Core, TEI-16, NR\_CLI\_RIM-Core To:RAN2, RAN4

LS in R4

[R2-2004362](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004362.zip) LS on Rel-16 RAN4 UE features lists for LTE and NR (R4-2005192; contact: NTT DOCOMO) RAN4 LS in Rel-16 To:RAN2 Cc:RAN1

[R2-2006004](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006004.zip) LS on Rel-16 RAN4 UE features lists for LTE and NR (R4-2005192; contact: NTT DOCOMO) RAN4 LS in Rel-16 To:RAN2 Cc:RAN1

- This LS was taken into account already in input email discussion 963

* Noted

R2-2006134 LS on Rel-16 RAN4 UE features lists for LTE and NR (R4-2009173; contact: NTT DOCOMO) Rel-16 RAN2 RAN1

LS out

R2-2005312 [draft] Reply LS on Rel-16 UE feature list Intel Corporation, NTT DoCoMo LS out Rel-16 NR\_UE\_pow\_sav, NR\_IAB-Core, NR\_eMIMO-Core, NR\_IIOT-Core, NR\_2step\_RACH-Core, 5G\_V2X\_NRSL-Core, NR\_Mob\_enh-Core, NR\_pos-Core, NR\_unlic-Core, LTE\_NR\_DC\_CA\_enh-Core, NR\_SON\_MDT-Core, NR\_CLI\_RIM, NG\_RAN\_PRN-Core, TEI16, NR\_L1enh\_URLLC-Core To:RAN1 Late

=> revised

[R2-2006023](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006023.zip) [draft] Reply LS on Rel-16 UE feature list Intel Corporation, NTT DoCoMo LS out Rel-16 NR\_UE\_pow\_sav, NR\_IAB-Core, NR\_eMIMO-Core, NR\_IIOT-Core, NR\_2step\_RACH-Core, 5G\_V2X\_NRSL-Core, NR\_Mob\_enh-Core, NR\_pos-Core, NR\_unlic-Core, LTE\_NR\_DC\_CA\_enh-Core, NR\_SON\_MDT-Core, NR\_CLI\_RIM, NG\_RAN\_PRN-Core, TEI16, NR\_L1enh\_URLLC-Core To:RAN1 Late

=> revised

DISCUSSION June 1

- Huawei think we should simplify the LS.

- Intel explains that there are still some comments.

- Chair: schedule a time tomorrow for LS approval.

[R2-2006029](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006029.zip) [draft] Reply LS on Rel-16 UE feature list Intel Corporation, NTT DoCoMo LS out Rel-16 NR\_UE\_pow\_sav, NR\_IAB-Core, NR\_eMIMO-Core, NR\_IIOT-Core, NR\_2step\_RACH-Core, 5G\_V2X\_NRSL-Core, NR\_Mob\_enh-Core, NR\_pos-Core, NR\_unlic-Core, LTE\_NR\_DC\_CA\_enh-Core, NR\_SON\_MDT-Core, NR\_CLI\_RIM, NG\_RAN\_PRN-Core, TEI16, NR\_L1enh\_URLLC-Core To:RAN1, RAN4 Late

DISCUSSION June 2

- Docomo think different groups have different understanding of what is feature grouping.

- ZTE think the overstrike text is not needed.

* Overstrike text to be removed, and with this change the LS is approved in R2-2006030.

General

[R2-2006020](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006020.zip) Open issues for Rel-16 UE capability handling Intel Corporation discussion

- Intel explains that the intention was to explain details on R1 and r4 related capabilities.

- Docomo wonder if we shall merge TEI16 CRs as well. Chair think there is a risj TEI 16 UE caps are not complete.

P1

- Oppo wonders about the status. Will R1 unclear things be discussed in R2 or not. They are marked yellow. Intel clarifies that R2 CRs will be based on stable information from R1.

- Huawei think that we should maybe not state P1 as it might prevent the other groups from having email progress,

* P1-P7 are agreed, i.e. the detailed plan for handling UE caps is endorsed.

[R2-2005311](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005311.zip) Report of email discussion [Post109bis-e][963][NR16] UE capabilities Intel Corporation, NTT DoCoMo discussion Rel-16 NR\_UE\_pow\_sav, NR\_IAB-Core, NR\_eMIMO-Core, NR\_IIOT-Core, NR\_2step\_RACH-Core, 5G\_V2X\_NRSL-Core, NR\_Mob\_enh-Core, NR\_pos-Core, NR\_unlic-Core, LTE\_NR\_DC\_CA\_enh-Core, NR\_SON\_MDT-Core, NR\_CLI\_RIM, NG\_RAN\_PRN-Core, TEI16, NR\_L1enh\_URLLC-Core Late

DISCUSSION

- Intel explains that all agreements were for either LS or Mobility and Positioning, so this will be treated there.

* Noted

[R2-2005313](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005313.zip) Release-16 UE capabilities for RAN1 and RAN4 feature list Intel Corporation, NTT DoCoMo CR Rel-16 38.331 16.0.0 1665 - B NR\_UE\_pow\_sav, NR\_IAB-Core, NR\_eMIMO-Core, NR\_IIOT-Core, NR\_2step\_RACH-Core, 5G\_V2X\_NRSL-Core, NR\_Mob\_enh-Core, NR\_pos-Core, NR\_unlic-Core, LTE\_NR\_DC\_CA\_enh-Core, NR\_SON\_MDT-Core, NR\_CLI\_RIM, NG\_RAN\_PRN-Core, TEI16, NR\_L1enh\_URLLC-Core Late

DISCUSSION

- Intel and docomo invite for commetns on the CRs. But expect the discussion to be more intense once updated for the R1 and R4 updates.

[R2-2005314](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005314.zip) Release-16 UE capabilities for RAN1 and RAN4 feature list Intel Corporation, NTT DoCoMo CR Rel-16 38.306 16.0.0 0329 - B NR\_UE\_pow\_sav, NR\_IAB-Core, NR\_eMIMO-Core, NR\_IIOT-Core, NR\_2step\_RACH-Core, 5G\_V2X\_NRSL-Core, NR\_Mob\_enh-Core, NR\_pos-Core, NR\_unlic-Core, LTE\_NR\_DC\_CA\_enh-Core, NR\_SON\_MDT-Core, NR\_CLI\_RIM, NG\_RAN\_PRN-Core, TEI16, NR\_L1enh\_URLLC-Core Late

[R2-2005582](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005582.zip) Discussion on the way of capturing Rel-16 UE capabilities Huawei, HiSilicon discussion Rel-16 NR\_newRAT-Core

DISCUSSION

P1

- Ericsson think that R2 should not specify mandatory/opt. Huawei think we should just capture what are the parts of a basic feature. Huawei don’t want to change signaling, and the proposal is to just provide information.

- Docomo think P1 is just to keep the current signaling. Docomo think the RP decision is mainly for marketing purpose, and think it is not realted to UE caps definitions.

- MTK think the R1 discussion on FG is confusing. A proposal is to specify constrints in field descriptions which is ok. If we have FG component without signaling it may be problematic. Fully support to keep the current signaling and think field desciprtions can be updates

- TMO US think that such profile info could be in a separate document rather than impacting signaling etc.

- QC think that R2 should not work on FG on a high level, e.g. verticals. R2 can capture R1 and R4 decisions on basic features in field descriptions.

- Huawei think that this is not urgent.

- Intel think it is clear now that there is no impact on signaling, and can consider info in FD.

- Oppo think that this should be catured in TR for feature list

- Ericsson think this can also be implemented in the ASN.1 structure.

- LG think this would be done after a release (a long time after)

- Vodafone think that for the basic level grouping can be useful but can be very complex on a higher level.

- CATT agrees this is not urgent.

- Intel think this is FFS in all cases from R1 and R4, intention right now is to have such information in Field description. For some cases we might adopt ASN.1 as well. Huawei would be ok with this.

- MTK think we will start with FD and ASN.1 structure and if we find this non-sufficient somehow we can think about other ways.

P2

- Intel is not comfortable with default values for R16. Oppo agrees and think default cvalues are only about mandatory without signaling. Samsung agrees with Intel.

- Ericsson agrees that it is best if the UE signals explicitly.

- LG doesn’t understand why default value is needed.

- QC think mandatory with cap signalling is intended for iot and there is no issue. For some other cases we might need default value. CATT agrees. BT agrees that the default value is not for iot. BT think it is better that the UE signals all the time.

* Noted

[R2-2005052](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005052.zip) Views on MIMO capability (FG 16-5c) vivo discussion Rel-16 NR\_eMIMO-Core

- vivo think this can be discussed later when R1 has produced some feedback.

GENERAL DISCUSSION TEI and Other WIs

- MTK wonder if TEI16 shall be merged also. QC think that would be ok, but we have already specified some Caps there.

- intel are ok to merge those, but think that the endorsed CR need to follow the guideline

- Docomo think we agreed yesterday to indeed do the merge

- vivo think that some agreed TEI CRs need to be updated based on R1 progress

* We merge also TEI16 and “other” UE caps into the mega CR, which means that for TEI16 (6.20) and “other” WI (6.19), RRC CRs need to be split into a UE caps part and function part, and both 331 and 306 UE cap CRs need to follow the guidelines (to be able to merge).

[R2-2005315](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005315.zip) Introduction of Release-16 UE positioning capabilities Intel Corporation, NTT DoCoMo CR Rel-16 37.355 16.0.0 0261 - B NR\_pos-Core R2-2003317 Late

Treated in the positioning session

[R2-2005109](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005109.zip) Discussion on the SRS UE capability in LPP Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

Treated in the positioning session

[R2-2005460](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005460.zip) Discussion on UE capability for OdSIB Huawei, HiSilicon discussion

- Ericsson think this is discussed in email discussion 607.

Treated by email [607] (positioning session)

[R2-2006105](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006105.zip) Way forward on Rel-16 RAN1/4 UE capability handling Intel Corporation discussion

DISCUSSION

P1

- Oppo wonder if this the basic feature group. Intel explains that P1 reaasonoing can be applied for each row.

- Oppo think this is for the very basic feature group. Intel think there is no difference.

- MTK think some FG has overlapping components. Shall be have only one bit per FG and explain in text or reflect components in signalling. Intel think this is new and think there shouldn’t be any overlap. MTK think that at least for NR-U search space there is overlap, and are wondering for this case what is the method. Intel think that for such cases we do ASN1 based on components. Huawei think this can be case by case and this is rare.

- Huawei agree that we should have strcture for FG to group components together. In addition to rap proposal we should be able to reflect such relations

- Ericsson agree with p1.

- docomo think this has not been changed from R15, and there will always be cases that been case cy case design.

- Oppo has strong concerns on grouping components always in signalling. Would prefer component level signalling and grouping on top. Oppo wonder if the reason is only signalling saving, think per component signalling can achieve the same thing.

- Samsung think the principle could be ok. Wonder if the intention is to have one bit per FG only. Intel think this depend on case by case, but yes the intention is to signal FG level whenever possible/reasonable. Samsung think we need to decide which case if per FG etc. Samsung think we shouldn’t optimize too much for signalling.

- QC think we need some baseline and think this is good as starting point for making a CR and then we need to discuss. MTK agrees with this view and think this is not only signalling reduction but also work opitmization. FW think this is ok and aligned with other groups conclusions. LG ok.

- Oppo think that for P1 we need some flexibility in the production of initial CRs, especially for V2X. Doocmo think that indeed for V2X there are large FGs that could be handled differently.

- Oppo wonder about repeated components. Intel think we don’t have time to ask R1 R4 in any case so we just follow their proposal, at least in the initial draft CRs.

- Oppo wonder if the LTE CRs will also follow P1. Nokia think yes as much as possible, as long as it doesn’t create problems. Huawei has Same view.

P2

- MTK prefer 2a, as not including features seems to mean that WI is not complete,

- Docomo think 2a Option 1 is the way to go.

- Huawei also support 2a, somewhat prefer option 2. There seesm to be some conditional mandatory caps.

- Ericsson think 2a O1 is ok, ans cond mandatory doesn’t impact the actual signalling. Oppo also support 2a O1

P3

- Intel explains that this proposal is intended for R4 parts with FFS, but the proposal is in general (e.g. UL TX switching has some FFSes). Intel think there are the options to a) remove the FFS part, or b) do not merge the CR (and do not submit to RP). Which could be the choice of the CR rapporteur.

- China telecom think FFses has been resolved now for UL TX switching. Huawei agrees.

- Docomo think that if there is a FFS then the feature should be out.

- Ericsson think we apply the same thinking as for P2.

- LG think due to IMT submission we need to leave the FFSes out.

- intel wonder for mobility, there is inconsistency between decisions in R2 and R4, what to do (FFS in R4). Docomo think R2 deicision can be applied then.

- Huawei think that feature group should be the intention, not feature. Intel think that the CR rapporteur can decide.

P4

- Huawei wonder from when we would do this. Docomo think this is immediately, i.e. for the review of this meeting’s CR.

**For NR UE capabilities**

* Principle for the initial Draft CR (which will need further discussion): Reconfirm that UE should support (and IOT tested) all the components of an FG unless explicitly stated to not have such dependency by RAN1 or RAN4.   
  Unless RAN1 or RAN4 has explicitly stated on the component dependencies, aim to have a struct for all the component of an FG instead of field description capturing the dependencies. (could also apply other principle for large FG).
* 2a Option 1: To skip the UE feature group entry if the FFS is in any column other than mandatory/optional column for any component in that feature group
* For the CRs that RAN2 is working on separately from the mega CR, the above agreement also applies i.e. 2a Option 1: To skip the UE feature group entry if the FFS is in any column other than mandatory/optional column for any component in that feature group. The CR rapporteur to take responsibility for this.
* RIL method is to be used for reviewing the mega CRs for Rel-16 capability after Intel/DCM publish these for review

### 6.0.3 Other

Other Cross WI issues, e.g. MAC issues.

Stage-2

* [AT110-e][061][NR16] Stage-2 (Nokia)

Scope: Treat R2-2004302, R2-2005998. General updates for R16 and corrections

Wanted Outcome: Agreed CR

Deadline: June 11, 0700 UTC

[R2-2004302](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004302.zip) LS on RAN1 input to Rel-16 TS 38.300 on V2X, Positioning and MR-DC (R1-2001356; contact: Nokia) RAN1 LS in Rel-16 5G\_V2X\_NRSL, NR\_pos-Core, LTE\_NR\_DC\_CA\_enh-Core To:RAN2

* [061] Noted, Already catured in 38300

[R2-2005998](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005998.zip) Stage 2 Cleanup Nokia (Rapporteur) CR Rel-16 38.300 16.1.0 0243 - F NR\_unlic-Core, NR\_IAB-Core, NR\_IIOT-Core Late

- all FFS have / are being removed by the corresponding 38.300 CRs in NR-U, IAB and IoT from this meeting.

* [061] Not pursued

MAC

* [AT110-e][062][NR16] MAC updates (Ericsson)

Scope: Treat R2-2005328, R2-2005501, R2-2005502, R2-2005562. Multi-WI MAC corrections.

Wanted Outcome: Agreed CR

Deadline: June 11, 0700 UTC

[R2-2005328](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005328.zip) Alignment of SR clause Ericsson, Samsung CR Rel-16 38.321 16.0.0 0732 1 F NR\_unlic-Core, NR\_eMIMO-Core R2-2003833

- [062] Rap: There is support to restructure the paragraph on cancellation of pending SR and the paragraph on cancellation of the Random Access procedure in clause 5.4.4.

* [062] The CR is postponed for next meeting

[R2-2005501](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005501.zip) 38321 CR Clarification on eLCID LG Electronics Inc., MediaTek CR Rel-16 38.321 16.0.0 0752 - F TEI16

=> Revised in R2-2006231

R2-2006231 38321 CR Clarification on eLCID LG Electronics Inc., MediaTek CR Rel-16 38.321 16.0.0 0752 1 F TEI16

* [062] Agreed

[R2-2005502](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005502.zip) Stopping ongoing Random Access procedure LG Electronics Inc. discussion Rel-16 TEI16

* [062] Noted

[R2-2005562](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005562.zip) Handling of unexpected eLCID values. ASUSTeK discussion Rel-16 38.321

* [062] The contribution is noted and its TP is merged with R2-2005501.

## 6.1 Integrated Access and Backhaul for NR

(NR\_IAB-Core; leading WG: RAN2; REL-16; started: Dec 18; target; June 20; WID: RP-200084, SR: RP-200083)

Time budget: 3 TU

Tdoc Limitation: 7 tdocs

### 6.1.1 Organisational

Including incoming LSs, draft TS, rapporteur inputs

GENERAL

BAP

- QC think the UL and DL mapping is discussed in R3 Access IAB node for UL impact BAP. Chair wonder if this is really in BAP. QC confirms yes. Huawei think SCTP multi-homing is discussed in R3 and there is some impact to that, but without that, current TS is sufficient. We need an LS from R3 for the multi-homing aspect. QC think there is a lot of implicit information from R3

- Chair: think we can attempt tto be pragmatic and progress the multi-homing aspect also if we don’t receive an LS.

- Multi-homing for F1-C, QC asks if the R3 agreements are clear. Huawei think that we have almost no issue in R2, and we can clarify this specific restrictions. Huawei think that if this is for IAB node implementation then we don’t need to discuss at all. QC think this can be brought to R3 if there is an issue.

- QC think that there could be multiple mappings, prefix configuration + address.

- QC further think that IE names between F1 AP and BAP mismatches. Huawei think we don’t need to use the same terminology, and think R3 hasn’t agreed the TP on F1-AP.

RRC\_INACTIVE

On RRC\_INACTIVE, QC proposed to first discuss in 045 and include R3 aspects. Chair think we can just forbid/not support RRC\_INACTIVE. ZTE think most companies are neutral. ZTE think we can not support it. Huawei think we can treat INACTIVE as IDLE in the IAB node. Intel think we don’t need to support RRC\_Inactive. CATT think alt 1 is that everything can be left for impl, alt 2

- Nokia think that this is under network control, and could leave for impl, would be ok to also not support. We shouldn’t in any case spend much time on RRC\_Inactive. Ericsson think we can support RRC Inactive and it can be up to implementation.

- LG think we shouldn’t support RRC Inactive, as it might bring more work. Vivo don’t understand how IAB inactive work, so we cannot do this in Rel16.

- Lenovo are ok to not support RRC\_Inactive, but wonder if we need to specify anything in Stage-2.

IP address allocation

- QC think that we do need to resolve RRC message for IP address allocation.

- Samsung explans that there are two optinos: New message or UE assistance Information message. Chair think we can define a new message, as this is IAB-specific functionality.

- Nokia think it is easy to reuse the UE assistance Information message, and think SRB3 support is easy to add. ZTE agrees that re-use is straight forward, and think this is used also for V2X, and impact is less. Lenovo support to reuse UE assistance info.

- Apple wonder if IAB nodes will use any other infomraiton and think a new message is straight forward. LG also think a new message is better as this is not about AS information,

- Huawei think that UE assistance message is more about UL intrmatio nand there is the prohibit timer. KDDI support new message

- FW think both approaches work and have a slight preferent to reuse the UE assistance info.

- CATT think a new message is better for future work. Vivo also support new message. Ericsson also support a new message.

- Nokia are ok to compromise and think the new message could have a generic name. LG agrees. Intel wonder what is the intention. Nokia think we don’t know so “IAB Information” ..

- LG wonder if a prohibit timer is needed.

* R2 think no effort should be spent to standardize extensions to RRC Inactive for IAB. If RRC Inactive is supported by an IAB MT, the operation (beyond what is currently specified) is completely up to implementation.
* We use a new message for IP address allocation (can consider to have a generic name)

[R2-2006087](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006087.zip) LS on IAB updates to 38.300 (R1-2004872; contact: Qualcomm) RAN1 LS in Rel-16 NR\_IAB-Core To:RAN2

### 6.1.2 Stage-2 Corrections

* [AT110-e][041][IAB] Stage-2 (Qualcomm, Huawei)

Scope: Treat papers under 6.1.2, issues, corrections etc, Capture meeting agreements impact to TS. Can take into account LSes etc, Endorsed CRs from last meeting is the baseline for further updates, if any are agreeable,

Intended outcome: Agreed CRs 38300 36300 (QC), 37340 (Huawei)

Deadline: June 11, 0700 UTC

CRs 38300 36300 (QC), 37340 (Huawei). Open: capture support for fast MCG recovery for IAB

[R2-2004688](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004688.zip) Stage-2 correction on RLF handling by IAB-MT Nokia, Nokia Shanghai Bell draftCR Rel-16 38.300 16.1.0 NR\_IAB-Core

[R2-2004782](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004782.zip) Conditional handover upon BH RLF in IAB Kyocera discussion Rel-16 NR\_IAB-Core

[R2-2005520](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005520.zip) Discussion on the R16 other WI features supporting for IAB-MT Huawei, HiSilicon discussion Rel-16 NR\_IAB-Core

[R2-2005672](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005672.zip) Applicability of Conditional Handover in IAB Samsung R&D Institute UK discussion

[R2-2005673](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005673.zip) Minor text correction for CR 38300 for IAB Samsung R&D Institute UK discussion

R2-2006210 [AT110e][041][IAB] 3800/36300 – Open issues Qualcomm Incorporated (Rapporteur) discussion

* [041] All above papers noted

[R2-2006303](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006303.zip) CR to 38.300 on Integrated Access and Backhaul for NR Qualcomm (Rapporteur) CR Rel-16 38.300 16.1.0 0220 1 F NR\_IAB-Core

- [041] Huawei: As to the adding “For SA mode, the establishment of DRBs is optional.”, we are not sure if we can add this right now. I am aware this is correct from R3 spec perspective. But, this is only correct after R2 agree the DRB configuration is optional and agree the TP in R2-2004611 to do the essential change in RRC. The later one did not even start yet. Anyway, we can even do the change in stage2 in next meeting, as long as RRC has done the corresponding changes.

* [041] Agreed

[R2-2005518](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005518.zip) Miscellaneous correction to 37.340 for IAB Huawei, HiSilicon CR Rel-16 37.340 16.1.0 0192 2 F NR\_IAB-Core R2-2004151

=> Revised in R2-2006146

R2-2006146 Miscellaneous correction to 37.340 for IAB Huawei, HiSilicon CR Rel-16 37.340 16.1.0 0192 3 F NR\_IAB-Core

* [041] Agreed

### 6.1.3 BAP Open Issues and Corrections

Open: Alignment with R3 agreements.

BAP CR by Huawei. Including outcome of email discussion [Post109bis-e][019][IAB] BAP (Huawei). Only the email discussion is expected to be treated.

* [AT110-e][042][IAB] BAP (Huawei)

Scope: Treat R2-2005584, R2-2005585, issues, corrections etc, Capture meeting agreements impact to TS. Can also take into account LSes / progress in other groups etc, Treat parts that don’t overlap with input email discussion of R2-2004593 R2-2005665 R2-2005666 R2-2005667. Endorsed CR from last meeting is the baseline for further updates,

Intended outcome: Agreed CRs 38340 (Huawei)

Deadline: June 11, 0700 UTC

DISCUSSION last day

- QC think there can be multiple UL mappings. Huawei think this is a minor issue. QC think the Huawei solution doesn’t work.

- Chair think we can discuss by email

[R2-2006226](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006226.zip) Summary for [AT110-e][042][IAB] BAP Huawei, HiSilicon discussion

[R2-2005665](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005665.zip) Clarification on BAP routing ID determination LG Electronics Inc. discussion Rel-16 NR\_IAB-Core

[R2-2004593](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004593.zip) Some left over issues on IAB BH RLF handling NEC Corporation discussion

[R2-2005666](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005666.zip) Consideration on default configuration during IAB migration LG Electronics Inc. discussion Rel-16 NR\_IAB-Core

[R2-2005667](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005667.zip) TP on default and BAP routing ID determination LG Electronics Inc. discussion Rel-16 NR\_IAB-Core

* [042] tdocs grouped above are all noted

CR

R2-2005584 Miscellaneous corrections to 38.340 for IAB Huawei, HiSilicon CR Rel-16 38.340 16.0.0 0001 2 F NR\_IAB-Core R2-2004153 Late

=> Revised in R2-2005584

[R2-2006227](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006227.zip) Miscellaneous corrections to 38.340 for IAB Huawei, HiSilicon CR Rel-16 38.340 16.0.0 0001 3 F NR\_IAB-Core

- Chair: One week email approval, take into acct R3 changes.

* [Post110-e][042][IAB] BAP (Huawei)

Scope: CR approval, take into account meeting agreements, incl R3 if needed

Intended outcome: Agreed CRs 38340

Deadline: Short

Not available

R2-2005585 Summary of email discussion [Post109bis-e][019][IAB] BAP Huawei discussion Rel-16 NR\_IAB-Core Late

### 6.1.4 User plane Open Issues and Corrections

LS from RAN1 is expected on the handling of the Guard Symbols MAC CE (i.e. if per cell or per CG). MAC CR and if needed a summary by Samsung. Including outcome of email discussion [Post109bis-e][020][IAB] MAC (Samsung). For issues treated in the email discussion only the email discussion is expected to be treated.

* [AT110-e][043][IAB] User Plane (Samsung)

Scope: Treat R2-2004966, R2-2004948, issues, corrections and relevant parts of other papers, Capture meeting agreements impact to TS. Can also take into account LSes / progress in other groups etc, Endorsed CR from last meeting is the baseline for further updates,

Intended outcome: Agreed CRs 38321

Deadline: June 11, 0700 UTC

[R2-2006086](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006086.zip) LS response to RAN2 LS on Guard Symbols in IAB (R1-2004784; contact: Samsung) RAN1 LS in Rel-16 NR\_IAB-Core To:RAN2 Cc:RAN4

* [043] Noted

[R2-2004966](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004966.zip) Summary of IAB User Plane open issues and corrections Samsung Electronics GmbH report Late

[R2-2006051](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006051.zip) Summary of IAB User Plane open issues and corrections Samsung Electronics GmbH report

* Noted

DISCUSSION

P3

- Nokia prefer explicit signaling, and think the implicit signaling do not work.

- Huawei agree that for UL the implicit signaling does not work.

- QC think that both work but if explicit is used then we could send all on one cell. Samsung think both can work and are ok either way.

- LG would like to keep current designs wich is implicit.

- Nokia thin there is no issues with explicit.

* Implementation-specific cancellation conditions for SR triggered by Pre-emptive BSR are not precluded. No changes to specs are needed to capture this – it is sufficient to capture this in meeting notes.
* Confirm that the MAC-CE will follow the R1 agreement: The Number of Guard Symbols is indicated per cell.
* the MAC CE contains the cell id information
* Remove all reserved values from the 2-octed IAB-specific eLCID space, and reassign all 128 values to BH RLC channel ID space.

[R2-2004948](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004948.zip) IAB MAC - rapporteur corrections and clarifications Samsung CR Rel-16 38.321 16.0.0 0708 3 F NR\_IAB-Core R2-2004126

=> R2-2006265

[R2-2006265](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006265.zip) IAB MAC - rapporteur corrections and clarifications Samsung CR Rel-16 38.321 16.0.0 0708 4 F NR\_IAB-Core

* [043] Agreed

[R2-2004946](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004946.zip) Finalising Rel-16 MAC design (IAB-related open issues) Samsung Electronics GmbH discussion

[R2-2004494](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004494.zip) On Guard Symbol MAC CE Design vivo discussion

[R2-2004495](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004495.zip) Remaining Issues of SR Cancellation for Preemptive BSR vivo discussion

[R2-2005521](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005521.zip) Adding AI-RNTI and IAB specific RACH parameters in MAC specification Huawei, HiSilicon discussion Rel-16 NR\_IAB-Core

[R2-2005522](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005522.zip) Differentiation between Pre-emptive BSR MAC CE and BSR MAC CE Huawei, HiSilicon discussion Rel-16 NR\_IAB-Core

[R2-2005563](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005563.zip) Remaining issue of SR triggered by Pre-emptive BSR ASUSTeK discussion Rel-16 38.321 NR\_IAB-Core

[R2-2005664](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005664.zip) Consideration on reserved value in two byte eLCID space LG Electronics Inc. discussion Rel-16 NR\_IAB-Core

* [043] All tdocs grouped above are noted

### 6.1.5 RRC Open Issues and Corrections

General

* [AT110-e][044][IAB] RRC CR (Ericsson)

Scope: FIRST Treat R2-2004607 and make agreements on everything as far as possible. Treat all Relevant RIL issues from ASN.1 review. Update RRC CR(s) to implement the solutions. When they are ready, take into account all IAB agreements and update further the RRC CR(s).

Part 1: Agreements relevant to Stage-3 from R2-2004607 and RIL issues.

Part 2: Agreed CR 38331 (Ericsson) (and 36331 if there is impact) for RP. Deadline: June 11, 0700 UTC

Last day

- Ericsson think R3 agreements might impact RRC.

DISCUSSION

- QC are wondering about the RACH configuration, for SI request. Ericsson think this is being discussed right now. Ericsson think that Option 2 is supported by majority.

RACH for SI request.

- 1 IAB-MT uses the same RACH config as UE (no application of IAB specific IEs in RACH config generic, they are ignored)

- 2 IAB-MT uses the same RACH config as UE (application of IAB specific IEs in RACH config generic)

- Huawei think Option 1 is more clear.

- FW wonder whay they would be configured if they are supposed to be ignored.

- QC indicate that the parameters are for other RACH.

- Nokia support 2, AT&T as well.

* Option 2: IAB-MT applies the IAB specific IEs in RACH config generic, for RACH for SI request.
* [Post110-e][044][IAB] RRC CR (Ericsson)

Scope: Take additional agreements into account if applicabe, incl R1 R3. Check correctness.

Intended Outcome: Agreed CR 38331 for RP

Deadline: Short

F1-C/F1AP transport and configuration etc

* [AT110-e][045][IAB] Partiuclar issues I Misc (ZTE)

Scope: Address open issues related to F1-C/F1AP transport and configuration including R2-2004338, address also R2-2004353 (if any impact at all), and address other non-IP or UAC issues not fully covered in [044], e.g. Support for RRC\_Inactive

Intended outcome: Report with functional Agreements (potentially also TPs).

Deadline: June 5, 0700 UTC

[045] DISCUSSIONS and DESICIONs

* [045] At most one default UL BAP routing ID and one default BH RLC channel is configured for dual-connected IAB node.
* [045] Default UL BAP routing ID and default BH RLC channel can be (re-)configured, e.g., when IAB node’s IP address for F1-C traffic change.
* [045] Default UL BAP routing ID and default BH RLC channel is only (re-)configured via RRCReconfiguration message. No explicit RRC signalling is supported for the release of the default UL BAP routing ID and default BH RLC channel configuration.
* [045] All Rel-15 UE common search space types apply to IAB-MT unless explicitly specified otherwise. No further clarification is needed in TS 38.331.
* [045] RAN2 to confirm RAN3’s agreement that IAB-MT could be configured with LTE leg only, NR leg only, or both LTE and NR leg for F1-C transfer.
* [045] Include F1-C transfer path field in the CellGroupConfig IE in NR RRCReconfiguration message.

[R2-2006319](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006319.zip) Summary of IAB Particular issues I Misc (ZTE) ZTE Corporation

* [045] Noted

[R2-2006157](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006157.zip) TP for F1-C transfer path configuration" ZTE Corporation draftCR Rel-16 38.331 NR\_IAB-Core

* [045] Merged with the IAB RRC CR

IP address handling

* [AT110-e][046][IAB] Partiuclar issues II IP Address handling (Samsung)

Scope: Address open issues related to IP address handling in a IAB Node, mainly RRC, can also discuss the Role of BAP if any such open issue, address R2-2004361,

Intended outcome: Report with functional Agreements (potentially also TPs).

Deadline: June 5, 0700 UTC

[R2-2006155](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006155.zip) Way forward on IP Address handling in IAB Samsung (Rapporteur)

* [046] Endorsed

[R2-2006351](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006351.zip) TP for TS 38.331 on IP Address allocation for IAB nodes Samsung

* [046] Merged with RRC CR

Access Control etc

* [AT110-e][047][IAB] Partiuclar issues III UAC (LG)

Scope: Address issues related to UAC and cause values, treat R2-2005992, R2-2005653,

Intended outcome: Report with functional Agreements (potentially also TPs).

Deadline: June 5, 0700 UTC

[R2-2006161](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006161.zip) E-mail discusson: [AT110-e][047][IAB] Particular issues III UAC LG Electronics discussion Rel-16 NR\_IAB-Core

* [047] To stick to the current RAN2 agreement on UAC that IAB MT Access Stratum shall consider its access as “allowed” as part of UAC, irrespective of AC and AI provided by NAS.
* [047] To introduce NO further changes to RAN2 specifications on UAC bypassing.
* [047] To introduce NO special handling for setting *establishmentCause* in RAN2 specifications. That is, the establishmentCause is set in accordance with the information received from upper layers as already specified in RAN2 specification.
* [047] To introduce NO special handling for setting *resumeCause* in RAN2 specifications.
* [047] NO action is taken in RAN2 to clarify UAC operation in both cases; a) IAB-MT is accessing a cell not broadcasting *iab-Support* indication, and b) IAB-MT capable of IAB is accessing a cell before having been authorized for IAB operation or having been configured with IAB parameters.

R2-2006211 Draft LS on establishment cause of IAB MT access LGE LS out Rel-16 NR\_IAB-Core To:CT1 Cc:SA2

* [047] Noted, not agreed

R2-2006351 TP for TS 38.331 on IP address allocation for IAB nodes Samsung draftCR 38.331 Rel-16 NR\_IAB-Core

#### 6.1.5.1 General

Issues coord, CRs by Ericsson. Only Rapporteur and CR editor input.

Including outcome of email discussion [Post109bis-e][920][IAB] RRC 2 (Ericsson). Note that for issues covered in the email discussion, only the email discussion will be treated.

[R2-2004353](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004353.zip) LS on RAN1 agreements related to resource multiplexing in IAB (R1-2003043; contact: Ericsson) RAN1 LS in Rel-16 NR\_IAB-Core To:RAN2

[R2-2004338](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004338.zip) LS on UL F1-C traffic mapping for intra-CU migration scenario (R3-202851; contact: ZTE) RAN3 LS in Rel-16 NR\_IAB-Core To:RAN2

[R2-2004361](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004361.zip) RRC Message Design for IAB IP Address Allocation (R3-202926; contact: Ericsson) RAN3 LS in Rel-16 NR\_IAB-Core To:RAN2

[R2-2005992](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005992.zip) Reply LS on UAC applicability to IABs (S1-202274; contact: Nokia) SA1 LS in Rel-16 NR\_IAB-Core To:RAN2, CT1 Cc:RAN3, SA2

R2-2004607 Report on email discussion [Post109bis-e][920][IAB] RRC 2 Ericsson discussion Rel-16 NR\_IAB-Core Late

#### 6.1.5.2 Open Issues

Open Issues: Signalling for Establishment of F1-C-over-LTE/X2AP path, RAN3 has several agreements on this matter and decided that the explicit path establishment is up to RAN2. IP address signaling via RRC based on RAN3 agreements LS from last meeting (new message?). Default UL mapping for target path after topology adaptation based on RAN3 agreements and LS from last meeting.

[R2-2004749](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004749.zip) Implications of RAN3 agreements on RRC configurations for IP- and BAP-layer Qualcomm Incorporated discussion Rel-16 NR\_IAB

[R2-2005655](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005655.zip) RRC message for IP allocation LG Electronics France discussion NR\_IAB-Core

[R2-2005656](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005656.zip) Support of RRC\_INACTIVE LG Electronics France discussion

[R2-2004496](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004496.zip) RRC signaling for IP request and indication vivo discussion

[R2-2004608](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004608.zip) Remaining Issues for IP Address Allocation in IAB Network Ericsson discussion Rel-16 NR\_IAB-Core

[R2-2004609](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004609.zip) On the Issue of INACTIVE mode for IAB-MT Ericsson discussion Rel-16 NR\_IAB-Core

[R2-2004610](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004610.zip) Further Discussion on F1-AP Transport in EN-DC Ericsson discussion Rel-16 NR\_IAB-Core

[R2-2004687](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004687.zip) RRC signalling for F1-C-over-LTE/X2 path configuration Nokia, Nokia Shanghai Bell draftCR Rel-16 38.331 16.0.0 NR\_IAB-Core

[R2-2004748](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004748.zip) IAB - establishment of F1-C over LTE Qualcomm Incorporated discussion Rel-16 NR\_IAB

[R2-2004750](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004750.zip) TP for 38331 on IP address signaling Qualcomm Incorporated other Rel-16 NR\_IAB

[R2-2004801](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004801.zip) Discussion on default UL mapping configuration during migration ZTE, Sanechips discussion

[R2-2004802](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004802.zip) Further discussion on F1-C over LTE path ZTE, Sanechips discussion

[R2-2004803](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004803.zip) Remaining issues of IP address allocation ZTE, Sanechips discussion

[R2-2004999](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004999.zip) TP for configuration on F1AP transport in EN-DC vivo discussion

[R2-2005157](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005157.zip) IP address configuration for IAB Samsung discussion Rel-16

[R2-2005524](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005524.zip) TP for IP addresss signaling of IAB [ToDo RIL H698] Huawei, HiSilicon discussion Rel-16 NR\_IAB-Core

[R2-2005625](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005625.zip) "Title: Draft CR to TS 38.331 on IP address request and configuration to IAB nodes" Futurewei draftCR Rel-16 38.331 16.0.0 B NR\_IAB-Core

[R2-2005657](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005657.zip) Options for IAB node address allocation using RRC Futurewei discussion

[R2-2005653](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005653.zip) Clarification of access control bypasssing LG Electronics France discussion NR\_IAB-Core

#### 6.1.5.3 Corrections

Corrections, Class 3 RIL issues. For accepted RIL issues, the proponent company may provide a discussion doc with annex TP (if needed) that do not count towards the tdoc limitation. Contributions should be reserved for more complicated issued and minor issues are expected to be resolved in RRC email discussions or by CR rapporteur without any tdoc.

[R2-2004612](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004612.zip) RIL E264 About Backhaul RLC Channel IDs Ericsson discussion Rel-16 NR\_IAB-Core

[R2-2004685](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004685.zip) Access category and establishment cause for IAB-MT [RIL: H697] Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_IAB-Core

[R2-2004686](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004686.zip) Draft LS to CT1 on IAB-MT establishment cause Nokia, Nokia Shanghai Bell LS out Rel-16 NR\_IAB-Core To:CT1 Cc:SA1

[R2-2004874](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004874.zip) [C501] Corrections to RRC Resume for IAB CATT discussion Rel-16 NR\_IAB-Core

[R2-2005406](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005406.zip) [C502] Corrections to IAB behavior in Determining the NPN-only Cell CATT discussion Rel-16 NR\_IAB-Core

[R2-2005525](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005525.zip) Clarification on the cause value and not supporting UAC for IAB [ToDo RIL H697] Huawei, HiSilicon discussion Rel-16 NR\_IAB-Core

[R2-2005526](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005526.zip) Default BAP configuration for non-bootstrapping cases [ToDo RIL H691] Huawei, HiSilicon discussion Rel-16 NR\_IAB-Core

[R2-2005527](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005527.zip) Suspending BAP operation at IAB-MT during RRC re-establishment, RRC inactive state [ToDo RIL H690] Huawei, HiSilicon discussion Rel-16 NR\_IAB-Core

[R2-2005528](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005528.zip) Correction on the TDD-UL-DL-ConfigDedicated-IAB-MT [ToDo RIL H696] Huawei, HiSilicon discussion Rel-16 NR\_IAB-Core

[R2-2005669](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005669.zip) [S001] Adding procedural text for smtc3 occasion derivation for IAB Samsung R&D Institute UK discussion

[R2-2005670](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005670.zip) [S002] Change of need code regarding smtc3list for IAB Samsung R&D Institute UK discussion

[R2-2005671](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005671.zip) [S003] Failure Type extension in SCGFailureInformation msg for IAB Samsung R&D Institute UK discussion

### 6.1.6 UE capabilities

Optionality of Rel-15 UE Features for IAB-MT: From RP 87e: RAN WGs to investigate which of the mandatory Rel-15 UE features (as defined in TR 38.822) can be optional for basic operation of [the IAB-MT] (and if found useful, for different classes of IAB-MTs as defined by RAN4). RAN WGs should strive to minimize specification impact.

Including outcome of email discussion [Post109bis-e][925][IAB] UE Cap (Nokia). It is assumed that only the email discussion will be treated. Input need to be input to the email discussion.

* [AT110-e][048][IAB] UE capabilities (Nokia)

Scope: Treat at least R2-2004684 and possibly other relevant input that does not overlap with the input email discussion, make agreements as far as possible.

Part 1: Agreements

Part 2: Agreed/Endorsed CR 306 331, Deadline: EOM

[R2-2006049](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006049.zip) Summary of Phase 1 of e-mail discussion: [AT110e][048][IAB] UE capabilities (Nokia) Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_IAB

DISCUSSION

P1-1

- LG wonder about BH RLF, Nokia think we agreed optional.

P1-2

- QC think this is needed for high desity use cases, but maybe not needed for all. Propose mandatory for Loca area IAB MT. Nokia think that for Wide area MT topology can be done by OAM, but mandatory for local area MT.

- AT&T think this need to be mandatory for all IAB MTs, and think a consistent decisions across group is needed. LG support this, and think topology adaptation is very important also for static IAB nodes. Intel think top adaptation is needed in all cases. AT&T think that relying only on OAM is not scalable also for the Wide Area case, and non-support would have serious limitations. Samsung support AT&T. KDDI generally agrees with AT&T but also think it is not always absolutely required, and for e.g. early deployments this may not be there. So mandatory with capability signaling is a good compromise. Huawei agrees and think in Rel-16 this should be optional. Verizon support AT&T but could accept mandatory with capability signaling. AT&T thikn that at least we can agree that it is mandatory for local area IAB MT

- ZTE think this is optional as it is not always needed. And think IP address allocation can be done in other ways and can be optional. Huawei agrees on topology adaptation, as mobile IAB is not needed, but think IP address assignment over RRC shall be mandatory. QC think IP address signaling in any case is mandatory. Nokia thikn the support for the new message is required in any case could be reworded.

- CATT think these can be mandatory with signaling.

- Ericsson think top adaptation is not in the minimum set.

- AT&T could accept that some early product don’t support, but don’t like to leave the mandatory with signaling TBD

- Huawei don’t want to accept that this is mandatory in Rel-16. Ericsson would like this to be optional, and think this is not part of the bare minimum set.

- Chair Summary On topology adaptation, Operators and (some) Network Vendors have opposite opinions. Attempt to agree Mandatory, Mandatory only for Local area IAB MT, Mandatory with possibility for early deployment non-support were all blocked by objections.

* Minimum set of IAB-MT capabilities should contain:

1. **Features which are indispensable for IAB-MT to perform initial access and establish an RRC connection and OAM connection with the network.**
2. **Basic BAP procedures, i.e. routing, bearer mapping**
3. **IP signalling over RRC**

DISCUSSION 2 (w2)

- Nokia think that UE capability signalling will be needed for local area IAB MTs.

- AT&T think P9 is ok. Wonder for P6 whether there is a need only for features that are changed from R15. Nokia think the proposal is that everything is included.

- Intel would prefer to use the UE caps framework for all kinds of IAB MTs. LG agrees and think this is important. Apple agrees as well.

- Ericsson think that wide-area IAB-MT shall not be required to support UE capability framework. Nokia agrees. Huawei agrees as well.

- Chair would like to understand what it means to agree 1-6. Can we then forget about UE capabilities for those.

- LG are ok with proposal. Samsung think we need to specify min set as well.

- AT&T think the features need to be specified in any case.

- Lg wonder about the 2nd sentence. Chair think acc to Huawei proposal it can be supported without further impact to signalling. Samsung think this should be captured in stage-2 e.g. 38300.

- AT&T wonder if we can make progress based on R1 agreements, Chair think yes, but an LS would have been preferable. Maybe UE caps rapporteur can try to collect and distribute the R1 agreements

* R2 to specify that IAB-MTs can make use of the UE capability signaling framework (including specification of minimum set). Whether it is actually used for e.g. Wide Area IAB-MTs may be up to implementation.

DISCUSSION last day

1-3

- Nokia think this has a lot of impact on implementation and think 1-3 shall not be agreed. Samsung agrees. LG agrees too w Nokia and Samsung. Lenovo also don’t support. Intel would be ok to not support 1-3 vivo also think we don’t need 1-3

- Futurewei think that R3 agreements anyway means that DRB need to be supported.

- Apple think for EN-DC we anyway support DRB.

- Ericsson think for SA DRB is optional and the impact is small.

- CATT are ok with this proposal 1-3. ZTE support this proposal as well. FW are also ok. AT&T support 1-3.

- Chair: the views are split 50-50

- Ericsson think not agreeing to 1-3 causes problems for R3. QC think R3 has not stated that DRB need to be optional. Nokia agree with QC.

- Chair proposes: Do not specify non-DRB operation for IAB-MTs, i.e. support for DRB is mandatory (i.e. the opposite of 3-1). Ericsson sustained objection.

- Then the chair propose instead to agree 3-1: Specify non-DRB operation for IAB-MTs.

* Agree 3-1 Specify non-DRB operation for IAB-MTs, i.e. support for DRB is optional.

[R2-2004684](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004684.zip) Summary of e-mail discussion: [Post109bis-e][925][IAB] UE Cap (Nokia) Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_IAB-Core Late

[R2-2006128](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006128.zip) Reply LS on IAB-MT Features (R4-2009051; contact: Qualcomm) Rel-16 NR\_IAB-Core RAN2 RAN1, RAN

[R2-2006094](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006094.zip) Reply LS on RAN4 IAB-MT feature list agreement (R1-2004954; contact: Qualcomm) RAN1 LS in Rel-16 NR\_IAB-Core To:RAN4 Cc:RAN2

[R2-2004373](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004373.zip) LS on RAN4 IAB-MT feature list agreement (R4-2005608; contact: Qualcomm) RAN4 LS in Rel-16 NR\_IAB-Core To:RAN2, RAN1

[R2-2004497](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004497.zip) Discussion for IAB-MT Capabilities vivo discussion

[R2-2004611](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004611.zip) Allowing an IAB Configuration Without DRB Ericsson discussion Rel-16 NR\_IAB-Core

[R2-2004731](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004731.zip) Capability signalling and mandatory/optional features for IAB MT Intel Corporation, KDDI, AT&T discussion Rel-16 NR\_IAB-Core

=> Revised in R2-2006032

[R2-2006032](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004731.zip) Capability signalling and mandatory/optional features for IAB MT Intel Corporation, KDDI, AT&T discussion Rel-16 NR\_IAB-Core

[R2-2004804](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004804.zip) Considerations on IAB-MT features ZTE, Sanechips discussion

[R2-2004805](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004805.zip) Discussion on channel bandwidth for Rel-16 IAB-MT ZTE, Sanechips discussion

[R2-2004875](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004875.zip) Proposals on IAB MT Capabilities CATT discussion Rel-16 NR\_IAB-Core

[R2-2004977](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004977.zip) Further discussion on Rel-15 IAB-MT capabilities Ericsson discussion Rel-16 NR\_IAB-Core

[R2-2005226](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005226.zip) Support of Rel-15 UE features by IAB-MTs AT&T discussion Rel-16

[R2-2005519](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005519.zip) Discussion on inapplicable features for IAB Huawei, HiSilicon discussion Rel-16 NR\_IAB-Core

[R2-2005654](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005654.zip) Capabilities of IAB MTs LG Electronics France discussion NR\_IAB-Core

[R2-2004498](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004498.zip) TP for indicator of IAB-MT class vivo draftCR Rel-16 38.331 16.0.0 NR\_IAB-Core

* [048] All tdocs in the group above are Noted

[R2-2006296](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006296.zip) Draft CR for IAB capabilities introduction to TS 38.331 Nokia, Nokia Shanghai Bell draftCR Rel-16 38.331 16.0.0 B NR\_IAB-Core

[R2-2006297](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006297.zip) Draft CR for IAB capabilities introduction to TS 38.331 Nokia, Nokia Shanghai Bell draftCR Rel-16 38.306 16.0.0 B NR\_IAB-Core

* [048] Both Endorsed, to be merged UE cap

Not Treated

[R2-2004978](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004978.zip) Introduction of IAB capabilities Ericsson CR Rel-16 38.331 16.0.0 1642 - B NR\_IAB-Core

[R2-2004979](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004979.zip) Introduction of IAB capabilities Ericsson CR Rel-16 38.306 16.0.0 0323 - B NR\_IAB-Core

### 6.1.7 Other Corrections

E.g. 3x.304, NPN support, we sent an LS and conditionally endorsed CRs.

* [AT110-e][049][IAB] Other (Huawei)

Scope: Treat papers under 6.1.7, identify agreeable items, make agreements as far as possible.

Part 1: Agreements

Part 2: Agreed CRs 304, 322, (RRC impacts should be captured in the main IAB RRC CR).

Deadline: EOM

[R2-2006165](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006165.zip) Reply LS on IAB supporting in NPN deployment (S2-2004469; contact: Qualcomm),

* [049] Noted, The LS clarifies that SA2 see no issue

R2-2006145 Summary of offline discussion [AT110e][049][IAB] Other Huawei discussion Rel-16 NR\_IAB-Core

* [049] *cellReservedForOtherUse* is ignored by IAB-MT for cell barring determination, but still considered by NPN capable IAB-MT for determination of an NPN-only cell.
* [049] IAB-MTs ignore the *cellReservedForFutureUse.*

[R2-2004780](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004780.zip) Better cell selection for IAB Nodes Apple discussion Rel-16 38.304 NR\_IAB

[R2-2004783](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004783.zip) Remaining issue on idle mode procedure for IAB-MT Kyocera discussion Rel-16 NR\_IAB-Core

[R2-2004876](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004876.zip) Remaining issues of IAB in NPN CATT discussion Rel-16 NR\_IAB-Core

[R2-2005142](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005142.zip) PWS information handling in IAB Sony discussion Rel-16 NR\_IAB-Core R2-2002664

* [049] 4 tdocs noted

[R2-2004784](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004784.zip) Corrections to 38.331 for supporting IAB in NPN Huawei, HiSilicon, Kyocera CR Rel-16 38.331 16.0.0 1590 2 B NR\_IAB-Core, NG\_RAN\_PRN-Core R2-2004280

=> Revised in R2-2006147

[R2-2006147](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006147.zip) Corrections to 38.331 for supporting IAB in NPN Huawei, HiSilicon, Kyocera CR Rel-16 38.331 16.0.0 1590 3 B NR\_IAB-Core, NG\_RAN\_PRN-Core

- [049] Chair: add reference to CR below and to CR 2382 to TS 23.501

* [049] coversheet need revision, the revised CR is agreed unseen

=> Revised in R2-2006320

R2-2006320 Corrections to 38.331 for supporting IAB in NPN Huawei, HiSilicon, Kyocera CR Rel-16 38.331 16.0.0 1590 4 B NR\_IAB-Core, NG\_RAN\_PRN-Core

[R2-2004785](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004785.zip) Corrections to 38.304 for supporting IAB in NPN Huawei, HiSilicon, Kyocera CR Rel-16 38.304 16.0.0 0157 2 B NR\_IAB-Core, NG\_RAN\_PRN-Core R2-2004281

=> Revised in R2-2006148

[R2-2006148](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006148.zip) Corrections to 38.304 for supporting IAB in NPN Huawei, HiSilicon, Kyocera CR Rel-16 38.304 16.0.0 0157 3 B NR\_IAB-Core, NG\_RAN\_PRN-Core

- [049] Chair: add reference to CR above and to CR 2382 to TS 23.501

* [049] coversheet need revision, the revised CR is agreed unseen

=> Revised in R2-2006321

R2-2006321 Corrections to 38.304 for supporting IAB in NPN Huawei, HiSilicon, Kyocera CR Rel-16 38.304 16.0.0 0157 4 B NR\_IAB-Core, NG\_RAN\_PRN-Core

[R2-2005516](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005516.zip) Miscellaneous corrections to 38.304 for IAB Huawei, HiSilicon CR Rel-16 38.304 16.0.0 0153 3 F NR\_IAB-Core R2-2004225

=> Revised in R2-2006149

R2-2006149 Miscellaneous corrections to 38.304 for IAB Huawei, HiSilicon CR Rel-16 38.304 16.0.0 0153 4 F NR\_IAB-Core

* [049] Agreed

[R2-2005517](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005517.zip) Miscellaneous corrections to 36.304 for IAB Huawei, HiSilicon CR Rel-16 36.304 16.0.0 0786 3 F NR\_IAB-Core R2-2004226

=> Revised in R2-2006150

R2-2006150 Miscellaneous corrections to 36.304 for IAB Huawei, HiSilicon CR Rel-16 36.304 16.0.0 0786 4 F NR\_IAB-Core

=> Revised in R2-2006258

R2-2006258 Miscellaneous corrections to 38.304 for IAB Huawei, HiSilicon CR Rel-16 38.304 16.0.0 0153 5 F NR\_IAB-Core

* [049] Not Needed

[R2-2005523](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005523.zip) Correction on RLC spec to support the BAP as upper layer Huawei, HiSilicon CR Rel-16 38.322 16.0.0 0036 - F NR\_IAB-Core

=> Revised in R2-2006151

R2-2006151 Correction on RLC spec to support the BAP as upper layer Huawei, HiSilicon CR Rel-16 38.322 16.0.0 0036 1 F NR\_IAB-Core

* [049] Agreed

## 6.2 NR-based Access to Unlicensed Spectrum

(NR\_unlic-Core; leading WG: RAN1; REL-16; started: Dec 18; target; June 20; WID: RP-192926; SR; RP-200459, Further prioritization guidance in RP-191581). Documents in this agenda item will be handled in a break out session.

Time budget: 3 TU

Tdoc Limitation: 3

### 6.2.1 General

Including incoming LSs, rapporteur inputs, etc.

Contributions in this AI are reserved for WI rapporteur inputs and/or spec rapporteur inputs and do not count towards the tdoc limits. All comments related to 38.300, 38.304 should be given to Ozcan, spec rapporteur. Qualcomm will produce a document with the received issues and update the CR directly

Including [Post109bis-e][937][NR-U] running CR on UE capabilities (Vivo) No contributions are expected for UE capabilities. Please provide your input to the email discussion.

[R2-2004315](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004315.zip) LS on intra-cell guard band configuration for NR-U (R1-2002908; contact: LGE) RAN1 LS in Rel-16 NR\_unlic-Core

[R2-2004351](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004351.zip) LS to RAN2 on NR-U ARFCN restriction for CGI reading (R1-2003032; contact: Qualcomm) RAN1 LS in Rel-16 NR\_unlic-Core To:RAN2

[R2-2004352](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004352.zip) LS on aligning RRC parameter list with TS38.213 (R1-2003040; contact: Lenovo) RAN1 LS in Rel-16 NR\_unlic-Core To:RAN2

[R2-2004354](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004354.zip) LS on Signaling of Q Parameter for NR-U (R1-2003044; contact: Charter Communications) RAN1 LS in Rel-16 NR\_unlic-Core To:RAN2, RAN4

[R2-2004359](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004359.zip) LS to RAN2 on clarification of RVID for the first transmission for CG-PUSCH (R1-2003074; contact: Qualcomm) RAN1 LS in Rel-16 NR\_unlic-Core To:RAN2

[R2-2004369](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004369.zip) LS on UE declaring beam failure due to LBT failur+B70:V70es during active TCI switching (R4-2005365; contact: Ericsson) RAN4 LS in Rel-16 NR\_unlic-Core To:RAN2, RAN1

[R2-2004370](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004370.zip) LS on timing reference cell adjustment under NR-U (R4-2005373; contact: ZTE) RAN4 LS in Rel-16 NR\_unlic-Core To:RAN1 Cc:RAN2

[R2-2004422](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004422.zip) Running CR to 38.306 on Introducing UE Capability for NR Shared Spectrum vivo draftCR Rel-16 38.306 16.0.0 B NR\_unlic-Core

[R2-2004544](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004544.zip) Deployment Scenarios for NR-U Qualcomm Incorporated, Nokia CR Rel-16 38.300 16.1.0 0229 - F NR\_unlic-Core

[R2-2004725](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004725.zip) [Draft] Reply LS on RVID selection for CG-PUSCH Qualcomm Incorporated LS out To:RAN1

[R2-2004829](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004829.zip) [Draft] Reply LS on NR-U ARFCN restriction for CGI reading Qualcomm Incorporated LS out To:RAN1

[R2-2004864](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004864.zip) ARFCN restriction for CGI reading Qualcomm Incorporated discussion

[R2-2005331](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005331.zip) Corrections of NR operating with shared spectrum channel access in 38.321 Ericsson, Nokia CR Rel-16 38.321 16.0.0 0726 2 F NR\_unlic-Core R2-2003875

[R2-2005334](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005334.zip) [DRAFT] LS reply to RAN4 on UE declaring beam failure due to LBT failures during active TCI switching Ericsson LS out Rel-16 NR\_unlic-Core To:RAN4

### 6.2.2 User plane

Including [Post109bis-e][935]][NR-U] MAC open issues (Ericsson)Contributions related to issues addressed by the email discussions should be avoided and are discouraged for this AI.

All identified critical open issues should be provided to the rapporteur via email discussion Post109bis-e#935 and new contributions on those topics are discouraged. Contributions should be reserved for more complicated issued.

No individual company CRs should be submitted

[R2-2004419](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004419.zip) Discussion on LBT Failure Detection and Recovery During HO with DAPS and CHO vivo discussion

[R2-2004420](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004420.zip) LBT Impacts on the TCI State Switching vivo discussion

[R2-2004421](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004421.zip) Draft Reply LS on UE Declaring Beam Failure due to LBT Failures During Active TCI Switching vivo LS out Rel-16 NR\_unlic-Core To:RAN4 Cc:RAN1

[R2-2004425](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004425.zip) Clarification on when to use one-octet or four-octet LBT failure MAC CE Samsung discussion Rel-16 NR\_unlic-Core

[R2-2004426](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004426.zip) Clarification on the variable LBT\_COUNTER Samsung discussion Rel-16 NR\_unlic-Core

[R2-2004549](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004549.zip) Remaining issues on UL LBT failure OPPO discussion Rel-16 NR\_unlic-Core

[R2-2004598](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004598.zip) Discussion about LBT failure and beam failure relation Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_unlic-Core

[R2-2004599](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004599.zip) Draft Reply LS on UE declaring beam failure due to LBT failures Nokia, Nokia Shanghai Bell LS out Rel-16 NR\_unlic-Core To:TSG RAN WG4 Cc:TSG RAN WG1

[R2-2004616](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004616.zip) UE declaring beam failure due to LBT failures during active TCI switching ZTE Corporation, Sanechips discussion

[R2-2004659](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004659.zip) UL LBT failures interactions with DAPS and CHO Intel Corporation discussion Rel-16 NR\_unlic-Core

[R2-2004660](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004660.zip) Draft CR for UL LBT failures under DAPS handover Intel Corporation draftCR Rel-16 38.331 16.0.0 F NR\_unlic-Core

[R2-2004671](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004671.zip) Beam failure declaration due to TC switching failure Intel Corporation discussion Rel-16 NR\_unlic-Core

[R2-2004974](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004974.zip) LBT failure recovery for DAPS and CHO Huawei, HiSilicon discussion Rel-16 NR\_unlic-Core

[R2-2004975](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004975.zip) Remaining issue on 2-step random access for NRU Huawei, HiSilicon discussion Rel-16 NR\_unlic-Core

R2-2004976 DraftCR on pending status for HARQ process in NR-U Huawei, HiSilicon discussion Rel-16 NR\_unlic-Core Revised

[R2-2005049](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005049.zip) Consistent LBT failure in DAPS Spreadtrum Communications discussion

[R2-2005050](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005050.zip) Consistent LBT failure in CHO Spreadtrum Communications discussion

[R2-2005054](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005054.zip) Text proposal for the pending status for HARQ process in NR-U Huawei, HiSilicon discussion R2-2004976

[R2-2005329](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005329.zip) LBT failure detection and recovery for DAPS and CHO Ericsson discussion Rel-16 NR\_unlic-Core

[R2-2005330](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005330.zip) UE declaring beam failure due to LBT failures during active TCI switching Ericsson discussion Rel-16 NR\_unlic-Core

[R2-2005332](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005332.zip) Corrections of NR operating with shared spectrum channel access in 38.321 Ericsson draftCR Rel-16 38.321 16.0.0 F NR\_unlic-Core

[R2-2005333](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005333.zip) Report on [Post109bis-e][935]][NR-U] MAC open issues (Ericsson) Ericsson discussion Rel-16 NR\_unlic-Core

[R2-2005550](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005550.zip) Handling of UL LBT failure for DAPS and CHO Qualcomm Incorporated discussion

[R2-2005713](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005713.zip) Consideration on DAPS and CHO in NR-U ZTE Corporation, Sanechips discussion Late

Withdrawn:

R2-2005053 Text Proposal Huawei, HiSIlicon discussion Rel-16 R2-2004976 Withdrawn

### 6.2.3 Control plane

Including [Post109bis-e][936][NR-U] RRC and ASN.1 open issues (Qualcomm)

Contributions related to issues addressed by the email discussions should be avoided and are discouraged for this AI.

All identified critical open issues should be provided to the rapporteur via email discussion Post109e#936 and new contributions on those topics are discouraged. Contributions should be reserved for more complicated issued.

No individual company CRs should be submitted

[R2-2004529](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004529.zip) Consistent LBT Failure Handling during Handover Samsung Electronics Co., Ltd discussion Rel-16 NR\_unlic-Core

[R2-2004543](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004543.zip) White listed cells for reselection to NR-U Qualcomm Incorporated CR Rel-16 36.304 16.0.0 0790 - B NR\_unlic-Core

[R2-2004545](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004545.zip) Miscellaneous corrections for NR-U Qualcomm Incorporated (Rapporteur) CR Rel-16 38.331 16.0.0 1528 2 F NR\_unlic-Core R2-2003878 Late

[R2-2004615](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004615.zip) Consideration on Multiple CG Support in NR-U ZTE Corporation, Sanechips discussion

[R2-2004622](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004622.zip) Signalling related to the extended RAR window Ericsson discussion NR\_unlic-Core

[R2-2004694](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004694.zip) On Applicability of DAPS Handover in NR-U MediaTek Inc. discussion

[R2-2004696](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004696.zip) On Conditional Handover in NR-U MediaTek Inc. discussion

[R2-2004799](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004799.zip) Report of [Post109bis-e][936][NR-U] RRC open issues Qualcomm Incorporated report Late

[R2-2004800](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004800.zip) Mobility to NR operating with shared spectrum access Qualcomm Incorporated CR Rel-16 36.331 16.0.0 4263 2 B NR\_unlic-Core R2-2004279

[R2-2004839](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004839.zip) U624, U613 and discussion on the RAN1 LS R1-2003040 on the searchSwitchTrigger ASN.1 coding Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_unlic-Core

[R2-2004840](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004840.zip) non numbered issue on ra-responseWindow Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_unlic-Core

[R2-2004990](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004990.zip) [H541-544] Text proposal for SlotFormatIndicator Huawei, HiSilicon discussion Rel-16 NR\_unlic-Core Late

[R2-2004991](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004991.zip) [H544][H548] DraftCR for COT sharing in configured grant Huawei, HiSilicon draftCR Rel-16 38.331 16.0.0 NR\_unlic-Core Late

[R2-2004992](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004992.zip) [H546][H547] DraftCR for ffsValue in ConfiguredGrantConfig Huawei, HiSilicon draftCR Rel-16 38.331 16.0.0 NR\_unlic-Core Late

[R2-2005617](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005617.zip) Discussion on issues with DAPS in NR-U LG Electronics Deutschland discussion NR\_unlic-Core

[R2-2005698](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005698.zip) Paging stop indication in TS 38.331 LG Electronics Inc. discussion

[R2-2005699](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005699.zip) Correction on triggering RSSI measurement report LG Electronics Inc. discussion

Withdrawn:

R2-2004546 Miscellaneous corrections for NR-U Qualcomm Incorporated CR Rel-16 38.331 16.0.0 1528 3 F NR\_unlic-Core R2-2002847

## 6.4 NR V2X

(5G\_V2X\_NRSL-Core; leading WG: RAN1; REL-16; started: Mar 19; target; June 20; WID: RP-200129; SR: RP-200431). Documents in this agenda item will be handled in a break out session

Time budget: 3 TU

### 6.4.1 General

Including incoming LSs, rapporteur inputs, etc. Contributions in this AI are reserved for WI rapporteur inputs and/or spec rapporteur inputs and do not count towards the tdoc limits.

[R2-2004312](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004312.zip) LS on the 3GPP work on the NR sidelink (S-200078; contact: VolksWagen) 5GAA WG4 LS in Rel-16 5G\_V2X\_NRSL-Core To:RAN, RAN1, RAN2

[R2-2004314](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004314.zip) LS on LTE V2X capabilities in NR V2X (R1-2002930; contact: Huawei) RAN1 LS in Rel-16 5G\_V2X\_NRSL-Core To:RAN2

[R2-2004316](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004316.zip) LS reply to RAN WG2 LS on NR V2X Security issues (S3-200820; contact: CATT) SA3 LS in Rel-16 5G\_V2X\_NRSL-Core To:RAN2

[R2-2004336](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004336.zip) Reply LS to RAN2 on Sidelink UE Information (R3-202831; contact: LGE) RAN3 LS in Rel-16 5G\_V2X\_NRSL To:RAN2

[R2-2004343](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004343.zip) LS on HARQ parameters for Mode 1 (R1-2002848; contact: Ericsson) RAN1 LS in Rel-16 5G\_V2X\_NRSL-Core To:RAN2

[R2-2004348](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004348.zip) LS on sidelink HARQ operations (R1-2002985; contact: LGE) RAN1 LS in Rel-16 5G\_V2X\_NRSL-Core To:RAN2

[R2-2004349](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004349.zip) LS on sidelink CSI report (R1-2002986; contact: LGE) RAN1 LS in Rel-16 5G\_V2X\_NRSL-Core To:RAN2

[R2-2004350](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004350.zip) LS on NR V2X Slot number determination (R1-2002990; contact: CATT) RAN1 LS in Rel-16 5G\_V2X\_NRSL-Core To:RAN2

[R2-2004374](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004374.zip) Reply LS on Sidelink UE capability for (NG)EN-DC and NE-DC (R4-2005646; contact: CATT) RAN4 LS in Rel-16 5G\_V2X\_NRSL-Core To:RAN2

[R2-2005727](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005727.zip) LS reply to RAN WG2 LS on the security related issues for NR SL (S3-201483; contact: CATT) SA3 LS in Rel-16 5G\_V2X\_NRSL-Core To:RAN2

[R2-2004576](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004576.zip) (draft)Reply LS on sidelink HARQ operations ZTE Corporation, Sanechips LS out Rel-16 5G\_V2X\_NRSL-Core To:RAN1

[R2-2004982](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004982.zip) [draft]Reply LS on sidelink HARQ operations CATT LS out To:RAN1 Late

[R2-2005075](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005075.zip) Correction on NR sidelink description Ericsson, Nokia CR Rel-16 38.300 16.1.0 0235 - F 5G\_V2X\_NRSL-Core

[R2-2005229](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005229.zip) [DRAFT] LS response to RAN1 on Sidelink HARQ operation Intel Corporation LS out Rel-16 5G\_V2X\_NRSL-Core To:RAN1

[R2-2005299](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005299.zip) Draft LS response on sidelink HARQ operations vivo LS out To:RAN1

[R2-2005466](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005466.zip) TP for final clean-up on RAN2 part in TR 37.985 Huawei, HiSilicon pCR Rel-16 37.985 1.3.0 5G\_V2X\_NRSL

R2-2005495 Miscellaneous corrections to 38.331 for V2X Huawei, HiSilicon CR Rel-16 38.331 16.0.0 1569 2 F 5G\_V2X\_NRSL-Core R2-2004072 Late

### 6.4.2 Control plane

#### 6.4.2.1 RRC

Including [Post109bis-e][952][V2X], [Post109bis-e][953][V2X], [Post109bis-e][954][V2X], and RRC ASN.1 issues that require WI-specific discussion. For accepted RIL issues, the proponent company can provide a discussion doc with an annex TP (if needed). Contributions should be reserved for more complicated issued and minor issues are expected to be resolved in RRC email discussions without any tdoc. This agenda item will utilize a summary document (Huawei).

[R2-2004401](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004401.zip) Left issues on RRC running CR [O311, O312, O315] OPPO discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2004404](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004404.zip) Correction on SL configuration procedure OPPO discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2004485](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004485.zip) R2-20xxxxx\_Introduction of segementation for SIB12 OPPO CR Rel-16 38.331 16.0.0 1607 - F 5G\_V2X\_NRSL-Core

[R2-2004486](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004486.zip) R2-20xxxxx\_Introduction of segementation for SIB28 OPPO CR Rel-16 36.331 16.0.0 4295 - F 5G\_V2X\_NRSL-Core

[R2-2004487](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004487.zip) Summary of [Post109bis-e][954][V2X] SIB12 overhead reduction (OPPO) OPPO discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2004525](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004525.zip) Corrections to Interruption handling during RLF Samsung Electronics Co., Ltd discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2004577](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004577.zip) Discussion on remaining issue related to RRC in NR V2X ZTE Corporation, Sanechips discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2004596](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004596.zip) Remaining issues on RRC for NR V2X Nokia, Nokia Shanghai Bell discussion Rel-16 5G\_V2X\_NRSL-Core R2-2003312

[R2-2004712](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004712.zip) Size of sl-PSFCH-RB-Set in SIB12 [M117] MediaTek Inc. discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2004901](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004901.zip) [C402] Correction on (Re)Selection of Synchronisation Reference CATT discussion Rel-16 38.331 5G\_V2X\_NRSL-Core Late

[R2-2004911](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004911.zip) [C403] The Detail of Slot Number Determination in 38.331 CATT discussion Rel-16 38.331 5G\_V2X\_NRSL-Core Late

[R2-2004935](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004935.zip) [C401]New RRC connection establishment trigger CATT discussion Late

[R2-2004937](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004937.zip) [C404]Issue on consistent zone configuration CATT discussion Late

[R2-2005131](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005131.zip) [B103] TP for sidelink transmission during fast MCG link recovery Lenovo, Motorola Mobility discussion Rel-16

[R2-2005132](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005132.zip) [B104] TP for sidelinkUEinformation with fast MCG link recovery Lenovo, Motorola Mobility discussion Rel-16

[R2-2005179](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005179.zip) [E261] Miscellaneous corrections for NR V2X Ericsson draftCR Rel-16 38.331 16.0.0 F 5G\_V2X\_NRSL-Core Late

[R2-2005180](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005180.zip) [E212] Correction to addModList for SL measurements Ericsson draftCR Rel-16 38.331 16.0.0 F 5G\_V2X\_NRSL-Core Late

[R2-2005293](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005293.zip) Sidelink communication reception (RIL#V022) vivo discussion

[R2-2005294](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005294.zip) Align RRC and SA2 spec on sidelink SRB handling (RIL#V023) vivo discussion

[R2-2005295](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005295.zip) UE behavior upon detecting sidelink SRB integrity check failure (RIL#V024) vivo discussion

[R2-2005310](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005310.zip) Need codes in sl-RxPool [M114] MediaTek Inc. discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2005326](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005326.zip) Corrections to SUI and RRCReconfigurationSidelink InterDigital discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2005327](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005327.zip) Configuration of HARQ Enable for NR V2X Interdigital discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2005461](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005461.zip) [H335] SR configuration for SL SRB Huawei, HiSilicon discussion

[R2-2005462](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005462.zip) [H336] Discussion on security policy related aspects for NR SL unicast Huawei, HiSilicon discussion

[R2-2005463](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005463.zip) [H352] Handling of integrity check failure in RRC for NR SL unicast Huawei, HiSilicon discussion

[R2-2005491](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005491.zip) Corrections on V2X functionalities in TS 36.331 Huawei, Hisilicon CR Rel-16 36.331 16.0.0 4336 - F 5G\_V2X\_NRSL-Core

R2-2005496 Summary of email discussion [952][V2X] RRC ASN.1 issues-38.331 Huawei, HiSilicon discussion Rel-16 5G\_V2X\_NRSL-Core Late

[R2-2005530](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005530.zip) Discussion on Interoperability of V2X UEs camped in different cells Apple, InterDigital Inc. discussion Rel-16 5G\_V2X\_NRSL-Core R2-2002808

[R2-2005542](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005542.zip) Remaining issues for NR SL preconfiguation parameters Qualcomm Finland RFFE Oy discussion Rel-16 38.331

[R2-2005544](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005544.zip) Sidelink PDCP out of order delivery configuration Samsung Electronics Co., Ltd discussion Rel-16 38.331 5G\_V2X\_NRSL-Core

[R2-2005545](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005545.zip) Configuration of remaining ROHC related parameters Samsung Electronics Co., Ltd discussion Rel-16 38.331 5G\_V2X\_NRSL-Core

[R2-2005546](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005546.zip) Clarification of SLRB configuration procedures Samsung Electronics Co., Ltd discussion Rel-16 38.331 5G\_V2X\_NRSL-Core R2-2003679

[R2-2005615](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005615.zip) Left issues on RRC for NR V2X LG Electronics France discussion Rel-16 38.331 5G\_V2X\_NRSL-Core

[R2-2005711](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005711.zip) Summary document of AI 6.4.2.1 - RRC aspects Huawei, HiSilicon discussion Late

Withdrawn:

R2-2004760 Introduction of Sidelink Counter Check Procedure Apple discussion Rel-16 5G\_V2X\_NRSL-Core Withdrawn

R2-2004899 [C402] Correction on (Re)Selection of Synchronisation Reference CATT discussion Rel-16 38.331 5G\_V2X\_NRSL-Core Late

R2-2004919 [C401]New RRC connection establishment trigger CATT discussion Rel-16 38.331 5G\_V2X\_NRSL-Core Late

R2-2004920 [C401]New RRC connection establishment trigger CATT discussion Rel-16 38.331 5G\_V2X\_NRSL-Core Late

R2-2004921 [C401]New RRC connection establishment trigger CATT discussion Rel-16 38.331 5G\_V2X\_NRSL-Core Late

R2-2004931 [C401]New RRC connection establishment trigger CATT discussion Rel-16 38.331 5G\_V2X\_NRSL-Core Late

R2-2004933 [C401]New RRC connection establishment trigger CATT discussion Rel-16 38.331 Late

R2-2004934 [C401]New RRC connection establishment trigger CATT discussion Rel-16 38.331 5G\_V2X\_NRSL-Core Late

#### 6.4.2.2 Others

Including [Post109bis-e][955][V2X], [Post109bis-e][956][V2X], and remaining other control plane issues (idle/inactive UE procedure, capabilities). Tdoc limitation: 1 tdoc for discussion with an annex TP (if needed) per specification. This agenda item will utilize summary documents (capability: OPPO, idle/inactive procedures: ZTE).

[R2-2004402](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004402.zip) Summary of [Post109bis#955] V2X UE capability issues (OPPO) OPPO report Rel-16 5G\_V2X\_NRSL-Core Late

[R2-2004403](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004403.zip) Summary of capability related Tdoc submitted to R2#109bis-E OPPO report Rel-16 5G\_V2X\_NRSL-Core Late

[R2-2004578](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004578.zip) Report of summary on NR V2X cell (re-)selection remaining issues ZTE Corporation, Sanechips discussion Rel-16 5G\_V2X\_NRSL-Core Late

[R2-2004579](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004579.zip) (draft)Running CR on TS 38.304 for remaining NR V2X cell (re-)selection issues ZTE Corporation, Sanechips draftCR Rel-16 38.304 16.0.0 5G\_V2X\_NRSL-Core Late

[R2-2004597](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004597.zip) On the peer UE capability transfer in unicast sidelink Nokia, Nokia Shanghai Bell discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2004761](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004761.zip) Discussion on SL Capability Apple discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2004798](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004798.zip) (draft)Running CR on TS 36.304 for remaining NR V2X cell (re-)selection issues ZTE Corporation, Sanechips draftCR Rel-16 36.304 16.0.0 B 5G\_V2X\_NRSL-Core Late

[R2-2005044](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005044.zip) TX resource pool configuration in mode1 Spreadtrum Communications discussion

[R2-2005076](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005076.zip) Correction for reselection priority handling for V2X communications in 36.304 Ericsson, ZTE, Sanechips CR Rel-16 36.304 16.0.0 0797 - F 5G\_V2X\_NRSL-Core

[R2-2005077](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005077.zip) Correction for reselection priority handling for V2X communications in 38.304 Ericsson, ZTE, Sanechips CR Rel-16 38.304 16.0.0 0170 - F 5G\_V2X\_NRSL-Core

[R2-2005127](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005127.zip) Remaining issues of cell (re)selection for NR V2X Lenovo, Motorola Mobility discussion Rel-16

[R2-2005133](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005133.zip) TP for 38.300 Conditional handover with sidelink Lenovo, Motorola Mobility discussion Rel-16

[R2-2005208](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005208.zip) Remaining issue on groupcast RRC state transition and future p-t-M delivery ITRI discussion 5G\_V2X\_NRSL-Core

[R2-2005296](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005296.zip) Discussion on SL UE capability details vivo discussion

[R2-2005465](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005465.zip) Miscellaneous Stage-2 corrections for NR SL communication in TS 38.300 Huawei, HiSilicon discussion

[R2-2005480](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005480.zip) Miscellaneous Stage-2 corrections for NR SL communication in TS 36.300 Huawei, HiSilicon discussion

[R2-2005547](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005547.zip) Discussion for Sidelink UE Capability Samsung Electronics Co., Ltd discussion Rel-16 38.306 5G\_V2X\_NRSL-Core

[R2-2005587](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005587.zip) Coverage status condition for NR sidelink communication transmission Samsung Electronics Co., Ltd discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2005721](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005721.zip) Summary of NR V2X cell (re-)selection related contributions for RAN2 #110e ZTE Corporation, Sanechips discussion Rel-16 5G\_V2X\_NRSL-Core

### 6.4.3 User plane

[R2-2005036](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005036.zip) LS on sidelink HARQ operations Lenovo, Motorola Mobility LS out 5G\_V2X\_NRSL-Core To:RAN1

#### 6.4.3.1 MAC

Including [Post109bis-e][957][V2X], [Post109bis-e][958][V2X], and remaining MAC issues. Tdoc limitation: 1 tdoc for discussion with an annex TP (if needed). This agenda item will utilize a summary document (LG).

[R2-2004406](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004406.zip) Left issues on MAC running CR OPPO discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2004520](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004520.zip) Discussion on SL CSI report trigger SHARP discussion 5G\_V2X\_NRSL-Core

[R2-2004580](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004580.zip) Discussion on remaining issue related to NR V2X MAC ZTE Corporation, Sanechips discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2004751](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004751.zip) Remaining issues for MAC MediaTek Inc. discussion Rel-16

[R2-2004759](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004759.zip) Discussion on remaining issues on NR V2X MAC Apple discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2004889](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004889.zip) Discussion on NR-V2X MAC left issues Fujitsu discussion Rel-16 5G\_V2X\_NRSL-Core R2-2002955

[R2-2004981](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004981.zip) Discussion on mixed blind and HARQ-based retransmissions CATT discussion Late

[R2-2004998](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004998.zip) Remaining issues in MAC for NR sidelink Nokia, Nokia Shanghai Bell discussion 5G\_V2X\_NRSL-Core

[R2-2005039](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005039.zip) Remaining MAC Issues Lenovo, Motorola Mobility, InterDigital Inc. discussion 5G\_V2X\_NRSL-Core

[R2-2005042](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005042.zip) Remaining issues on MAC for NR V2X Spreadtrum Communications discussion

[R2-2005043](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005043.zip) Discussion on mixed blind and feedback-based HARQ retransmissions for NR sidelink Spreadtrum Communications discussion

[R2-2005074](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005074.zip) Discussion on MAC left issues Ericsson discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2005207](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005207.zip) Groupcast HARQ feedback without location information Kyocera discussion

[R2-2005228](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005228.zip) On mixing of blind and feedback based HARQ retransmissions Intel Corporation discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2005297](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005297.zip) Remaining MAC issues vivo discussion

[R2-2005325](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005325.zip) Remaining Issues on HARQ for NR V2X InterDigital, Apple, Lenovo, Motorola Mobility discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2005492](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005492.zip) Discussion on remaining MAC Open issues for 5G V2X with NR SL Huawei, Hisilicon discussion 5G\_V2X\_NRSL-Core

[R2-2005515](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005515.zip) Groupcast HARQ feedback from RX UE without location information Futurewei discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2005541](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005541.zip) Remaining V2X MAC Issues LG Electronics France discussion Rel-16 38.321

[R2-2005564](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005564.zip) Left NR V2X issues regarding SL MAC CE ASUSTeK discussion Rel-16 38.331 5G\_V2X\_NRSL-Core

[R2-2005575](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005575.zip) Remaining MAC issues Qualcomm Finland RFFE Oy discussion Rel-16 38.321

[R2-2005705](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005705.zip) Discussion on BSR prioritization issue Beijing Xiaomi Software Tech discussion

[R2-2005719](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005719.zip) [Post109e#22] CR to 38.321 on Corrections to NR sidelink LG Electronics Inc. CR Rel-16 38.321 16.0.0 0730 1 F 5G\_V2X\_NRSL-Core R2-2003523

[R2-2005720](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005720.zip) Report of [Post109bis-e][957][V2X] MAC issues LG Electronics Inc. discussion

[R2-2005725](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005725.zip) Summary of V2X MAC issues LG Electronics Inc. discussion Rel-16 5G\_V2X\_NRSL-Core

Withdrawn:

R2-2004941 Open issue on mixing blind and feedback-based HARQ retransmissions of a TB in the sidelink HARQ operations CATT discussion Late

R2-2004968 Open issue on mixing blind and feedback-based HARQ retransmissions of a TB in the sidelink HARQ operations CATT discussion Late

R2-2004980 Discussion on mixed blind and HARQ-based retransmissions CATT discussion Late

#### 6.4.3.2 Others

Including [Post109bis-e][959][V2X] and remaining other user plane issues (RLC, PDCP, and SDAP). Tdoc limitation: 1 tdoc for discussion with an annext TP (if needed) per specification. This agenda item will utilize summary documents (RLC: Ericsson, PDCP: CATT, SDAP: Vivo).

[R2-2004581](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004581.zip) Discussion on the establishment-release of the Rx SDAP entity ZTE Corporation, Sanechips discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2004747](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004747.zip) Remaining Issues on PDCP CATT discussion Rel-16 Late

[R2-2004881](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004881.zip) Draft LS on trigger of PDCP reestablishment OPPO LS out Rel-16 5G\_V2X\_NRSL-Core To:CT1

[R2-2004888](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004888.zip) 38.323 CR for NR V2X CATT CR Rel-16 38.323 16.0.0 0048 - C 5G\_V2X\_NRSL-Core Late

[R2-2005045](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005045.zip) Discussion on counter check procedure for NR sidelink Spreadtrum Communications discussion

[R2-2005055](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005055.zip) Remaining issues in PDCP for NR sidelink Nokia, Nokia Shanghai Bell discussion 5G\_V2X\_NRSL-Core

[R2-2005298](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005298.zip) Open issues on NR V2X SDAP vivo discussion

[R2-2005343](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005343.zip) Remaining issues for NR SL PDCP header format Qualcomm Finland RFFE Oy discussion Rel-16 38.323

[R2-2005464](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005464.zip) Discussion on PDCP SN size for SL groupcast and broadcast in NR V2X Huawei, MediaTek Inc.,HiSilicon discussion

[R2-2005548](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005548.zip) Clarification of SL PDCP Operation Samsung Electronics Co., Ltd discussion Rel-16 38.323 5G\_V2X\_NRSL-Core

[R2-2005677](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005677.zip) Summary of NR V2X SDAP related contribution vivo discussion Late

R2-2005724 Summary of PDCP remaining issues on NR V2X CATT discussion Rel-16 5G\_V2X\_NRSL-Core

## 6.5 Optimisations on UE radio capability signalling

(RACS-RAN-Core; leading WG: RAN2; REL-16; started: Mar 19; target; Jun 20; WID: RP-191088, SR: RP-200163). Documents in this agenda item will be handled in a break out session.

R2 part is 100%. Only corrections.

Tdoc limitation: 1 per company

### 6.5.1 Organisational

Including incoming LSs, rapporteur inputs, etc.

Contributions in this AI are reserved for WI rapporteur inputs and do not count towards the tdoc limits.

[R2-2004321](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004321.zip) Reply LS on RACS and signalling of UE capabilities at handover (S2-2003483; contact: Ericsson) SA2 LS in Rel-16 RACS-RAN-Core To:RAN2, RAN3

[R2-2004324](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004324.zip) LS on different coding formats (S2-2003507; contact: Samsung) SA2 LS in Rel-16 RACS-RAN-Core To:RAN2, RAN3, CT4, CT3

[R2-2004710](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004710.zip) Correction to transfer of UE capabilities at HO for RACS and correction of ASN.1 review issues [N012][N013] MediaTek Inc., Ericsson, ZTE Corporation, Sanechips CR Rel-16 36.331 16.0.0 4256 2 F RACS-RAN-Core R2-2003906

[R2-2004711](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004711.zip) Work plan for RACS-RAN work item MediaTek Inc., CATT discussion Rel-16 RACS-RAN-Core

[R2-2005539](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005539.zip) Correction to transfer of UE capabilities at HO for RACS and minor ASN.1 correction (38.331) ZTE Corporation, Ericsson, MediaTek Inc.,Sanechips,OPPO CR Rel-16 38.331 16.0.0 1553 2 F RACS-RAN-Core R2-2003905

### 6.5.2 Corrections

Including contributions/TPs on RACS-specific Class 3 ASN.1 review aspects, if any. For these, no individual company CRs should be submitted: please consult with the RRC CR rapporteurs first (Nathan.Tenny@mediatek.com for 36.331 and Gao.Yuan66@zte.com.cn for 38.331).

## 6.6 Void

## 6.7 NR Industrial Internet of Things (IoT)

(NR\_IIOT-Core; leading WG: RAN2; REL-16; started: Mar 19; target; Jun 20; WID: RP-192324 SR: RP-200165)

Time budget: 3 TU

Tdoc Limitation: 7 tdocs

### 6.7.1 General

Rapporteur input. Incoming LS etc.

[R2-2004675](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004675.zip) Summary of IIOT WI agreements and open issues Nokia (rapporteur) discussion Rel-16 NR\_IIOT

R2-2006088 Reply LS on Intra-UE Prioritization (R1-2004899; contact: LGE) RAN1 LS in Rel-16 NR\_IIOT-Core To:RAN2

R2-2006104 LS on Intra-UE Prioritization for data with different priorities (R1-2005078; contact: vivo) RAN1 LS in Rel-16 NR\_IIOT-Core To:RAN2

### 6.7.2 RRC Open Issues and Corrections

#### 6.7.2.1 Open Issues

Open issues on Accurate Reference timing: FFS the need for a prohibit timer T346. FFS whether the UE is allowed to send the same interest message. Note that scheduling issues have been moved to the MAC subclause below.

* [AT110-e][053][IIOT] Accurate Reference Time (NTT DOCOMO)

Scope: Address the following FFSes: FFS 1 whether the UE is allowed to send the same interest message again. FFS 2 the need for a prohibit timer T346. Can also address other proposals provided in the documents under 6.7.2.1 if there is interest (proponents will need to push and explain).

Intended outcome: Agreements

Deadline: June 5, 0700 UTC

[R2-2006050](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006050.zip) Report of email discussion [AT110-e][053][IIOT] Accurate Reference Time (NTT DOCOMO) NTT DOCOMO report Rel-16 NR\_IIOT-Core

[053] DISCUSSION

- [053] Chair: On P1, I don’t see any logic that could contradict. If the application (TSN) clock deviates from RAN system clock then it is adjusted in an application function, which is the system solution selected for R16, do P1 seems straight forward.

- vivo think the SFN time and reference time clocks could be different. ZTE agrees

- Huawei think P1 puts too much limitation on UE implementation.

- Docomo agrees with P1, but think that P2 need to be discussed anyway,

- QC support P1 thikn gNB clock is accurate and for P2 it is Option A.

- Samsung think gNB can determine when time info is needed. Apple also support P1. Nokia also agrees. Nokia think tht gNB can know when to refresh time. Mediatek agrees,

- Oppo support P1 and think there is no clock drift issue.

- CATT think that there is a requirement that UE and gNB need to be synchronized, and think P1 is sufficient.

- Intel think the proposals are interrelated.

P2

- intel think B is a superset of A, and think A can be realized with B if prohibit timer is set to infinity.

- vivo think we can have clock drift both at UE and network side, and network cannot know the clock drift at UE side.

- QC think A would be the main case, B should be for abnormal conditions. Docomo support A. B would involve a lot of signalling.

- CATT think there is no significant clock drift at the UE side. Cannot be worse than 0.1 ppm due to R4 requirements.

* UE can calculate/predict the reference timing based on DL timing information after receiving the referenceTimeInfo from gNB once. (No spec impact)
* Option A. Once UE send the interest request, UE rely on periodic gNB broadcast/unicast to refresh its reference time and should no longer resend the request to the network. (and nothing more)

[R2-2004830](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004830.zip) Remaining issues on Accurate Reference timing NTT DOCOMO, INC. discussion

[R2-2004585](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004585.zip) Open issues on Accurate Reference Timing CATT discussion NR\_IIOT-Core

[R2-2004676](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004676.zip) Remaining issues for accurate reference time request Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_IIOT

[R2-2004736](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004736.zip) Remaining issues on the UE request of the reference time vivo discussion

[R2-2004957](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004957.zip) Remaining details on UE request of reference time Ericsson discussion NR\_IIOT-Core

[R2-2005040](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005040.zip) FFS for UE request for accurate reference timing ZTE Corporation, Sanechips, China Southern Power Grid Co., Ltd discussion Rel-16 NR\_IIOT\_URLLC\_enh-Core

[R2-2005152](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005152.zip) Request of accurate reference time delivery Huawei, HiSilicon discussion NR\_IIOT-Core

[R2-2005300](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005300.zip) On UE request of reference time provisioning Intel Corporation discussion Rel-16 NR\_IIOT-Core

[R2-2005340](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005340.zip) Discussion on the need of prohibit timer and retransmission of the same interest message OPPO discussion Rel-16 NR\_IIOT-Core

[R2-2005646](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005646.zip) Confirmation of UE assistance with referenceTimeInfoInterest Samsung discussion Rel-16 NR\_IIOT-Core

* [053] all tdocs above noted

#### 6.7.2.2 Corrections

Corrections, Class 3 RIL issues. For accepted RIL issues, the proponent company may provide a discussion doc with annex TP (if needed) that do not count towards the tdoc limitation. Contributions should be reserved for more complicated issued and minor issues are expected to be resolved in RRC email discussions or by CR rapporteur without any tdoc.

* [AT110-e][054][IIOT] RRC (Ericsson)

Scope: Treat at least email discussion summary in R2-2004954 and the resulting updated CR. Address all other relevant Review issues (RILs), with or without tdocs. Implement meeting agreements in the CR.

Part 1: Agreements (rapporteur to announce deadline)

Part 2: Agreed CRs 38331 (36331 if applicable)

Deadline: June 11, 0700 UTC

[R2-2004954](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004954.zip) Email discussion summary on RRC corrections Ericsson discussion Late

DISCUSSION

1b

- Ericsson explains that this number will be captured as a UE capability but is related to r1 discussion.

- Oppo wonder if the r1 parameter is really per MAC entity, maybe we need some separate parameter. Ericsson think that the R2 agreement is not so clear and think it is better to wait for R1.

P4

- MTK think we said “preference in being provisioned with reference time information”. Ericsson agrees.

* RAN2 confirm that “up-to 32 CG configurations can be configured per Cell Group across all BWPs” is captured by the constant maxNrofConfiguredGrantConfigMAC-r16.
* “Support up to 32 SPS configurations per MAC entity” is not captured in 38.331.
* In conditional presence MoreThanTwoRLC, change to “Upon RRC reconfiguration when a PDCP entity is associated with more than two logical channels, this field is optionally present”.
* RAN2 confirm moving sps-PUCCH-AN-List from SPS-ConfigList to PUCCH-Config.
* Set the status of RIL issue H578 to “ConcReject”
* Change the wording “interest in reference time information” to “preference in being provisioned with reference time information”.

[R2-2004590](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004590.zip) [C601] PDCP Duplication Configuration in MR-DC CATT discussion NR\_IIOT-Core

[R2-2004958](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004958.zip) [E225] On simplification for PDCP-duplication Ericsson discussion NR\_IIOT-Core

[R2-2005649](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005649.zip) Radio Bearer with More than Two RLC Entities for Downlink Duplication or Split [E225] Samsung discussion Rel-16 NR\_IIOT-Core

* [054] tdocs above noted
* [Post110-e][054][IIOT] RRC (Ericsson)

Scope: Continue discussions. Caputre further meeting agreements, also from other WG.

Intended Outcome: Agreed CRs 38331 36331

Deadline: Short

Not Available

R2-2005155 [H575][H578][H580] Flagged miscellaneous corrections to Ethernet header compression configuration Huawei, HiSilicon discussion NR\_IIOT-Core Late

R2-2005156 [H570] Flagged correction to UE's interest in reference time information Huawei, HiSilicon discussion NR\_IIOT-Core Late

R2-2004953 Way forward for class 3 RIL issues Ericsson discussion Late

R2-2004955 correction of NR IIoT Ericsson CR Rel-16 38.331 16.0.0 1641 - F NR\_IIOT-Core Late

R2-2004956 correction of NR IIoT Ericsson CR Rel-16 36.331 16.0.0 4300 - F NR\_IIOT-Core Late

### 6.7.3 MAC Open Issues and Corrections

Email discussion [Post109bis-e][913][IIOT] MAC CR and remaining issues (Samsung)

* [AT110-e][055][IIOT] MAC (Samsung)

Scope 1: Treat the email discussion summary in R2-2005645, make agreements as far as possible (difficult discussion can be brought on-line instead, for desicions). Address other relevant issues under 6.7.3.1 not overlapping with the email discussion and/or previous agreements, if any. Address also inter-UE-prioritization below.

Scope 2: Implement meeting agreements in the CR.

Part 1: Agreements (rapporteur to announce deadline)

Part 2: Agreed CRs 38321. Deadline: EOM

[R2-2005645](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005645.zip) Report of [Post109bis-e][913][IIOT] MAC Remaining issues Samsung report Rel-16 NR\_IIOT-Core

* [055] noted

[R2-2006046](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006046.zip) Report of [AT110e][055][IIOT] MAC: Part 1A Samsung discussion Rel-16 16.0.0 NR\_IIOT-Core

DISCUSSION

P4

- CATT think the proposal with the minimal text is the best as this point, so O1.

- LG think that if both options work then the simpler option is preferable, O1

- Vivo proposed O1, but think more text may be needed with it.

- Samsung think that when high priority data arrives, the current text is problematic, and think that detailed spec is better support for UE impl and support O2.

- Lenovo also think the second one is better, and the first one may require more change. CATT think no more text is needed, when we check other grants we don’t consider already depriortized grants. There is nothing missing.

- Huawei are also not sure what is missing for option 1, and think O1 has more flexibility for implementation than O2. Apple agrees with Huawei.

- Oppo think both options can work but O1 introduces more load in the UE, so O2 is better.

- QC don’t think the language in O2 is not suitable sue to unclarity and think we should agree on O1, and if needed add additional text.

- MTK think there isn’t any significant difference between the options, and think O1 is better bec it just avoids processing order text.

- Fujitsu think with O1 we don’t see the full picture, as there might need to be some text added.

- ZTE support option 2 as O1 means that we need further change.

If we assume O1, is there then an issue that need to be clarified?

- ZTE think that the further change, that a de-priortized grant cannot be considered again.

- Sony think the ZTE condition is already in the text, and also CATT clarified this.

P7

- Asustek wonder if we don’t specify anything what is the UE behaviour what will be the UE behaviour. What happens if the grant is a retransmission grant.

- vivo think that an SR colliding with a grant is always deprioritized.

- Ericsson think that this is the Rel-15 behaviour.

- Huawei think this can be up to UE implementation, Option 3 = Option 4.

- Nokia would be ok with UE implementation, but would be OK to just just agree P7

- ZTE also think this could be up to UE implementation.

- LG think that even without any further clarification SR is always deprioritized, as in Rel-15, and we can consider that MAC CE has lowest priority as it has no priority.

- Lenovo think this would be up to UE implementation and that this should be the current behaviour (without change).

- Oppo think MAC CE has always lowest priority.

- Samsung think that acc to current spec SR by MAC CE has no priority and it is handled as lowest priority SR.

P11

- some companies think this was not captured, and Samsung proposes to capture as a NOTE.

- Ericsson think that the proposed note is not clear and just adds more confusion, and think this is just a corner case, a wrong network configuration.

- LG think the processing time restriction is applied for many cases and if we add it here for only this case it is confusing.

- Lenovo think a Note is needed, as the normative text seems to prohibit this UE implementation. Lenovo think this is not a corner case.

- vivo think we should not re-discuss.

- ZTE think the UE has no choice so this do not need to be clarified.

- IDT think we could simplify the note.

- MTK agrees that something is needed as the procedure text seems to insinuate the opposite.

P6

- LG think that L1 priority need to be checked. Samsung think that this may be the case. LG think this is not acceptable, and a proposal like “MAC entity shall not generate the second PDU that cannot be transmitted by L1” could be acceptable. Nokia think MAC will know about L1 priority in any case, as there is L1 priority in LCH retrictions. CATT think we should not have generic statement.

- Huawei think that if we have generic text then the same text could cover the case of P8. Huawei also think R1 is working on this.

- Oppo agrees with the proposal and it is aligned with R1. Oppo wonder about the “second” PDU. CATT don’t see a problem

- Oppo think we should use other wording than second PDU.

- Chair proposes “MAC entity shall not generate a PDU that cannot be transmitted due to collision with transmission with equal L1 priority”. LG cannot agree to this as this statement is incomplete, and even with different L1 priority there are cases when MAC PDU shall not be generated.

- CATT has concerns on the generic approach. Lenovo agrees. Both CATT and Lenovo think there is dependencies between MAC and timeline restrictions for a generic statement.

- Ericsson think that for cases other than equal L1 priority may need further consideration by R1 and furher discussion

- Apple would be ok with LG proposal, but equal priority need to be incl, and possibly higher priority.

- Nokia don’t understand why processing time is discussed again and again.

- Huawei think there is no dep to processing time.

- vivo agrees with LG and think we should nt list all the L1 cases in MAC, as it generates lot of maintenance. MTK agrees with vivo.

- MTK think that for all cases when a PDU cannot be transmitted, MAC should not generate a PDU, also in the case of a higher priority PDU. Sony agrees with LG and MTK.

* Remove the current condition “for each uplink grant which is not already a de-prioritized uplink grant”
* RAN2 will not specify further on priority of SR triggered by MAC CE in Rel-16. The intention of current MAC text is that such SR has no priority and is handled as lowest priority.
* A NOTE for RAN2#109-e agreement on next CG selection for autonomous retransmission to be added. Current proposal is not agreeable, possibly a simplified version can be considered, TBD offline (if no agreement in the end we just skip the Note for now).
* (When MAC determines to generate a PDU) MAC entity shall not generate a PDU that cannot be transmitted due to collision with transmission (at least due to equal L1 priority).

[R2-2006243](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006243.zip) Report of [AT110e][055][IIOT] MAC: Part 1B Samsung discussion Rel-16 NR\_IIOT-Core

Email [055] by-email Agreements (R2-2006243)

* UE continues to use the occasion of the suspended configured grant type 1 when the related UL BWP is activated.
* A de-prioritized SR shall be excluded in prioritization. TP proposed by Fujitsu/Huawei/vivo/OPPO/Nokia can be a baseline.
* For closest N determination, TP in R2-2003586 is adopted.
* RAN2 confirms “CG configurations with the same HARQ process on different BWPs are different and separate CG configurations.”
* A CG cancelled by Cancellation Indicator (CI) is considered as a de-prioritized uplink grant and the MAC entity autonomous transmit the MAC PDU in the subsequent CG
* SR overlapping with uplink grant received in RAR, or addressed to temporary C-RNTI, or with MSGA transmission cannot be transmitted.
* Prioritization between non-overlapping uplink grants is NOT supported in Rel-16.
* TP in R2-2005124 on priority of uplink grant with no data is adopted.
* MAC specification does not have a NOTE to determine the closest N.
* RAN2 confirms that HARQ process ID can be shared between different CGs on different BWPs.
* The autonomous transmission is allowed only for the same CG with the same HARQ process in the same BWP.
* For each uplink grant which can be transmitted by lower layers, the MAC entity evaluates whether it is a prioritized uplink grant. TP of R2-2005647 is a baseline.
* Postponed to next meeting: A NOTE for RAN2#109-e agreement on next CG selection for autonomous retransmission will be added. The following TP is a baseline: “It is up to the UE implementation to determine the closest available next configured grant configured with *autonomousTx* for the transmission of the MAC PDU of the same HARQ process of the previously de-prioritized uplink grant.”

[R2-2005652](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005652.zip) Correction for NR IIOT in 38.321 Samsung CR Rel-16 38.321 16.0.0 0712 3 F NR\_IIOT-Core R2-2004289 Late

* [055] Agreed

#### 6.7.3.1 Intra-UE prioritization and multiplexing

Open: LCH-based prioritization when handling grant with the same L1 priority or when no PHY-based prioritization is enabled (pending RAN1 reply LS). Other open issues handled in email discussion.

Independent configuration of MAC and PHY prioritisation

[R2-2004923](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004923.zip) Handling of Absence of PHY-based or LCH-based prioritization configuration Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_IIOT-Core

[R2-2005070](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005070.zip) Discussion on LCH-based prioritization and PHY-based prioritization Huawei, HiSilicon discussion Rel-16 NR\_IIOT-Core

[R2-2004586](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004586.zip) Impacts of independent configuration of intra-UE prioritization in PHY and MAC layers CATT discussion NR\_IIOT-Core

Equal PHY priority

[R2-2005647](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005647.zip) MAC Impact of MAC-PHY Misalignment in Prioritization Samsung discussion Rel-16 NR\_IIOT-Core

[R2-2004588](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004588.zip) MAC TP addressing PHY limitations for equal-priority collisions CATT discussion NR\_IIOT-Core

[R2-2004885](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004885.zip) Avoid providing second MAC PDU with the same L1 priority to PHY SHARP Corporation discussion

[R2-2004890](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004890.zip) On prioritization handling for PUSCH and PUSCH with the same L1 priority Fujitsu discussion Rel-16 NR\_IIOT-Core

[R2-2004891](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004891.zip) On prioritization handling for SR and PUSCH with the same L1 priority Fujitsu discussion Rel-16 NR\_IIOT-Core

[R2-2004922](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004922.zip) Intra-UE Prioritization with the Same L1-Priority Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_IIOT-Core

[R2-2004959](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004959.zip) On interaction between LCH-based and PHY-based prioritization Ericsson discussion NR\_IIOT-Core

[R2-2005503](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005503.zip) Intra-UE prioritization with the same L1 priority LG Electronics Inc. discussion Rel-16 NR\_IIOT-Core

Deprioritised grant being reprioritised

[R2-2004960](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004960.zip) Remaining issues on intra-UE priortization Ericsson discussion NR\_IIOT-Core

[R2-2005149](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005149.zip) Remaining issues of Intra-UE prioritizations Sony discussion Rel-16 NR\_IIOT-Core

[R2-2005337](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005337.zip) Open issues on intra-UE prioritization OPPO discussion Rel-16 NR\_IIOT-Core

Other

[R2-2005648](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005648.zip) Correction to Prioritization between SR and Random Access Related Uplink Grant Samsung discussion Rel-16 NR\_IIOT-Core

[R2-2004739](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004739.zip) Text proposal for the UE autonomous retransmission vivo, Samsung discussion

[R2-2004900](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004900.zip) Handling of autonomous transmissions following a BWP switch Lenovo, Motorola Mobility discussion Rel-16 NR\_IIOT-Core

[R2-2004961](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004961.zip) CG/SPS remaining issues Ericsson discussion

[R2-2005124](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005124.zip) Consideration on the intra-UE multiplexing involved SR ZTE, Sanechips discussion Rel-16 NR\_IIOT-Core

Inter-UE Prioritization

2 tdocs moved from 6.22.3, NOTE these docs are moved here in order to treat them in-context. If Agreed, the CR should be merged with the eURLLC MAC running CR.

[R2-2004964](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004964.zip) CG autonomous transmission in inter-UE priortization Ericsson discussion NR\_L1enh\_URLLC-Core

[R2-2004965](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004965.zip) draft CR on CG autonomous transmission in inter-UE priortization Ericsson draftCR Rel-16 38.321 16.0.0 NR\_L1enh\_URLLC-Core

Further Enhancements

[R2-2005565](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005565.zip) SR-data prioritization regarding MAC CE-triggered SR ASUSTeK discussion Rel-16 NR\_IIOT-Core

[R2-2005566](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005566.zip) Handling UL grant prioritization with non-overlapping PUSCH duration ASUSTeK discussion Rel-16 NR\_IIOT-Core R2-2003648

[R2-2004587](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004587.zip) Considerations on SR Prioritization CATT discussion NR\_IIOT-Core

[R2-2004738](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004738.zip) Priority of SR triggered by BFR or LBT failure vivo, ZTE corporation, OPPO discussion

#### 6.7.3.2 Other

E.g. issues related to scheduling enhancements, which are not part of an email discussion, e.g. whether to support allowing CG periodicities of multiple of 2/7 symbols as a separate capability with a cross-slot boundary capability as a pre-requisite.

* [AT110-e][056][IIOT] Scheduling Enhnancments (vivo)

Scope: Treat R2-2004737, R2-2004677, R2-2005338. Note that the proposal in R2-2004677 was attempted last meeting, failed due to nonsufficient support. Now there seems to be additional supporter so we can check if people has changed their mind (no need to re-do a lot of the discussion)

Wanted Outcome: Agreements

Deadline: June 5 0700 UTC

[R2-2006039](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006039.zip) Report of [AT110-e][056][IIOT] Scheduling Enhancements (vivo) vivo report

**The extra CG periodicities of multiple of 2/7 symbols are not introduced in Rel-16.**

P1

- Samsung think there is no problem with limiting to positive values and think this shold be clarified in MAC. Fujitsu agrees, and think this was omitted by mistake. LG also think N is not negative.

- Oppos intention is to clarify, but think that if time offset is large then for URLLC traffic negative value may be useful. Samsung think that the network can simpliy keep small time domain offset.

- ZTE think there is already implicit statements that makes N non negative. Nokia think we should clarify.

P2

- vivo indicate that this is the majority view.

- Nokia think that all expressed concerns have been addressed in their paper. There are indeed use cases, and in order to cover certain periodicities otherwise we’d need many configurations. Nokia is proposing to have this as a separate capability.

- QC think this introduces a very large set of numbers, and think testing is an issue. QC are open to add specific values, but not this flexibility. LG has the same understanding as QC. Nokia don’t have a specific value, and think it might be difficult to predict one specifc,

- CATT think that this is also useful when matching traffic patterns to different numerologies.

- MTK think this was discussed many times and not agreed and think we have discussed various solutions.

* N is non negative (rapporteur to include this in MAC CR discussion whether and how to capture)
* The extra CG periodicities of multiple of 2/7 symbols are not introduced in Rel-16

[R2-2004737](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004737.zip) Clarification on the suspension of the CG type-1 vivo discussion

[R2-2004677](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004677.zip) Periodicities of multiple of 2 or 7 symbols for CG Nokia, Nokia Shanghai Bell, Ericsson, NTT Docomo, CMCC, CATT, Sony discussion Rel-16 NR\_IIOT

[R2-2005338](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005338.zip) Open issues on scheduling enhancement OPPO discussion Rel-16 NR\_IIOT-Core

* [056] 3 tdocs noted

Overlaps with email discussion

[R2-2005339](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005339.zip) Discussion on remaining issues for Type-1 CG OPPO discussion Rel-16 NR\_IIOT-Core

[R2-2005613](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005613.zip) Discussion on the open issue for CG type 1 CMCC discussion Rel-16 NR\_IIOT-Core

Further enhancements

[R2-2005051](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005051.zip) Handling of collision involving measurement gap Spreadtrum Communications discussion

### 6.7.4 PDCP Open Issues and Corrections

[R2-2005504](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005504.zip) 38323 CR NR PDCP corrections for NR IIOT LG Electronics Inc. CR Rel-16 38.323 16.0.0 0049 - F NR\_IIOT-Core

=> Revised in R2-2006224

R2-2006224 38323 CR NR PDCP corrections for NR IIOT LG Electronics Inc. CR Rel-16 38.323 16.0.0 0049 1 F NR\_IIOT-Core

* [045] Agreed

[R2-2005505](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005505.zip) 36323 CR LTE PDCP corrections for NR IIOT LG Electronics Inc. CR Rel-16 36.323 16.0.0 0286 - F NR\_IIOT-Core

=> Revised in R2-2006225

R2-2006225 36323 CR LTE PDCP corrections for NR IIOT LG Electronics Inc. CR Rel-16 36.323 16.0.0 0286 1 F NR\_IIOT-Core

* [045] Agreed

#### 6.7.4.1 PDCP Duplication

Summary if needed and PDCP CR by LG. Open: For NR-DC, it is FFS how the nodes can coordinate RLC entities activation/deactivation between each other (pending RAN3 discussions).

* [AT110-e][045]or [057][IIOT] PDCP Duplication and PDCP CRs (LG)

Scope: Treat R2-2005723, determine agreeable parts and and make agreements. Implement meeting agreements in updated CRs.

Part 1: Agreements (rapporteur sets the deadline)

Part 2: Agreed CRs 38323 36323

Deadline: June 11 0700 UTC

[R2-2006066](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006066.zip) [AT110e][045][IIOT] PDCP Duplication and PDCP CRs LG Electronics discussion Rel-16 NR\_IIOT-Core

DISCUSSION

P2/P3

- CATT think this is a change wrt R15. Are there cases when UE will know which node signals. LG think the UE doesn’t need to know whether there is network coordination. UE just follows the MAC CE. It is up to network to make sure it works. CATT think this is not useful but ok with majority view.

- On P3 Nokia think we are waiting for R3 on network coordination, will there be some case when CA+DC dupl will not be used. Huawei think that same vendor never has a coord issue.

- LG just want to clarify that the UE doesn’t need to analyse but just follow.

- Nokia think the UE need to ignore some bits dpending on which node seends the MAC CE.

- QC think the UE shall just follow. MTK agrees, and think R15 assumes network coordination. ZTE agrees. Oppo agrees as well. Apple agrees. CMCC agrees as well, and think the network can be smart to avoid any issues. vivo agrees as well.

- Samsung think that also with Nokias proposal network coordination is needed, so also Samsung prefers to keep current behaviour.

P4

- Chair wonder if the WID is clear on this. Nokia think it is.

P5

- Chair: R2 agrees with this but no need to list as an agreement.

- Fujitsu wonder if this covers both r15 and r16 duplication.

- LG think no other company has a concern on the text.

P6

- MTK think the agreement is ok, but it was related to a badly phrased note in the email discussion, which is not preferable.

- CATT want to clarify CA duplication as well. LG are ok with that.

- Nokia think we should avoid using the wording “CA duplication”

* The presence of *pdcp-Duplication* indicates the PDCP duplication configuration (i.e. *pdcp-Duplication* is always used to indicate the PDCP duplication configuration for both DRBs and SRBs). The 38.331 and 38.323 specifications need to be changed accordingly.
* The UE just follows the received MAC CE, even if the RLCi field belongs to the other node. No specification change is required.
* PDCP duplication with more than two RLC entities is supported only by NR. It needs to be clarified in 37.340 and 38.331.
* Clarify DC+CA duplication in 38.300. 3+1 duplication scenario also needs to be considered. CA duplication may need clarification. Wording to be worked on.
* In the description of *duplicationState* in 38.331, remove “initial” and use “at the time of receiving this IE”.

[R2-2005723](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005723.zip) Summary of AI 6.7.4.1 PDCP duplication LG Electronics Inc. report Rel-16 NR\_IIOT-Core

[R2-2004589](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004589.zip) Control of Duplication by Rel-16 Duplication MAC CE CATT discussion NR\_IIOT-Core

[R2-2004740](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004740.zip) Clarification on the RRC-based activation of PDCP duplication vivo discussion

[R2-2004887](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004887.zip) Configuration of PDCP duplication (discuss issues raised in E225) SHARP Corporation discussion

[R2-2004892](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004892.zip) MAC update on R15 MAC CE not used for moreThanTwoRLC Fujitsu discussion Rel-16 NR\_IIOT-Core

[R2-2004924](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004924.zip) Issues with Network Coordination for PDCP Duplication Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_IIOT-Core

[R2-2005068](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005068.zip) Clarification of DC+CA duplication definition Huawei, HiSilicon discussion Rel-16 NR\_IIOT-Core

[R2-2005506](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005506.zip) Indication of PDCP duplication configuration LG Electronics Inc. discussion Rel-16 NR\_IIOT-Core

[R2-2005650](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005650.zip) Clarification on Initial State of PDCP Duplication in IIOT Samsung discussion Rel-16 NR\_IIOT-Core

R2-2006141 Summary of IAB particular issues I Misc ZTE Corporation discussion

=> Revised in R2-2006319

R2-2006319 Summary of IAB particular issues I Misc ZTE Corporation discussion

#### 6.7.4.2 Ethernet Header Compression

Summary if needed by Intel

* [AT110-e][046]or[058][IIOT] EHC (Intel)

Scope: Treat R2-2005589, determine agreeable parts and and make agreements.

Wanted Outcome: Agreements

Deadline: June 5 0700 UTC

[R2-2006058](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006058.zip) Report of email discussion [AT110e][058][IIOT] EHC (Intel) Intel Corporation discussion Rel-16 NR\_IIOT-Core

DISCUSSION

P1

- QC think the name of the IE may need update. Intel have no strong view. Chair think that it can be discussed in CR review.

- CATT think we didn’t have such parameter for UL for ROHC. Intel think the maxCID is for DRB.

P2

- Nokia think we should allow this. LG don’t think so, MTK agree with LG,

- Intel think companies just don’t want to further discuss this case

- Huawei think this can be reconfigured at PDCP reestablishment.

- Nokia think that at least for the case of PDCP reestablishment wo continue this could be allowed. Futurewei think that at reestablishment everything is reset. FW think most companies don’t want to have the continue option for reestablishment.

- LG don’t want to change CID length as it changes the packet format.

- docomo agrees with Nokia proposal.

P3

- Ericsson think this is not needed as the same language is used for ROHC. LG think thisis not needed.

- Huawei think this is clearer. MTK agrees with the proposal as there indeed is an option to update.

- Chair: not agreed

- Huawei wonder if we can change establish to (re)establish. LG think re-establish just makes more confusion.

P4

- MTK thought this would be needed, as this is not a well known protocol. ZTE also think this is helpful. Vivo think this could be good but it is late in R16 it is more important to finish. QC also have some sympathy for this.

- Samsung think this brings maintenance work. Oppo agrees tht we shouldn’t need to capture examples.

P567 continue by email

P8

- Sony are ok to compromise but would like to leave for implementation the compressor behaviour.

- Nokia think indeed that we could leave this for impl.

* Parameter *maxCID-EHC* is introduced in TS 38.331 to indicate the maximum number of EHC contexts the UE can establish in uplink for a DRB
* CID length cannot be reconfigured during the lifetime of the DRB. Field description of *ehc-CID-Length* is updated by adding a sentence “The value for this field cannot be changed after the initial configuration”
* We don’t capture an example of operation on the different Ethernet header structures as an informative text.
* Leave trigger in compressor for CID overwriting for implementation (right now the only mandatory trigger is when max CID has been reached).

R2-2006142 Report of phase 2 of email discussion [AT110-e][058][IIOT] EHC (Intel) Intel Corporation discussion Rel-16 NR\_IIOT-Core

* [058][046] In TS 38.323 clause 5.12.4 and TS 36.323 clause 5.14.4, clarification is added that EHC compressed packets include EHC full header packets and EHC compressed header packets.
* [058][046] In TS 38.323 Annex A.1, for the description of EHC operation, change “compressed” to “removed”.
* [058][046] There is no need to change field name “PAYLOAD (+PAD)” to “PAYLOAD” in Figure A.2.1.1-1 and A.2.1.1-2 of TS 38.323.
* [058][046] In TS 38.331 and TS 36.331, IE *maxCID-EHC-UL* is introduced, with the value range: INTEGER (1..32767). The field description is: “Indicates the value of the MAX\_CID\_EHC\_UL parameter as specified in TS 38.323 [5]. The total value of MAX\_CID\_EHC\_ULs across all bearers for the UE should be less than or equal to the value of *maxNumberEHC-Contexts* parameter as indicated by the UE.”

[R2-2005589](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005589.zip) Summary on Ethernet Header Compression Intel Corporation discussion Rel-16 NR\_IIOT-Core Late

[R2-2004542](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004542.zip) Remaining Issues in Ethernet Header Compression III discussion Rel-16 Late

[R2-2004678](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004678.zip) EHC remaining issues Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_IIOT

[R2-2004679](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004679.zip) Clarification on Ethernet frame handling by EHC Nokia, Nokia Shanghai Bell, ZTE Corporation discussion Rel-16 NR\_IIOT

[R2-2004742](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004742.zip) Corrections on the EHC vivo discussion

[R2-2004962](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004962.zip) Remaining EHC issues Ericsson discussion NR\_IIOT-Core

[R2-2005041](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005041.zip) Remaining FFS for EHC in TSC ZTE Corporation, Sanechips discussion Rel-16 NR\_IIOT\_URLLC\_enh-Core

[R2-2005147](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005147.zip) Switching from Compressed header in EHC to Full header Sony discussion Rel-16 NR\_IIOT-Core

[R2-2005154](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005154.zip) Remaining issues about EHC Huawei, HiSilicon discussion NR\_IIOT-Core

[R2-2005336](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005336.zip) Open issues on EHC OPPO discussion Rel-16 NR\_IIOT-Core

### 6.7.5 Stage-2 Corrections

Summary if needed and 38300 CR by Nokia

* [AT110-e][059][IIOT] Stage-2 CRs (Nokia, Huawei)

Scope: Updated Stage-2 CR. Capture meeting agreements, corrections.

Wanted Outcome: Agreed CRs 37340 (Huawei) 36300 38300 (Nokia)

Deadline: June 11 0700 UTC

[R2-2005067](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005067.zip) Introduction of IIOT features to TS 37.340 Huawei, HiSilicon CR Rel-16 37.340 16.1.0 0195 2 B NR\_IIOT-Core R2-2003888

=> Revised in R2-2006288

[R2-2006288](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006288.zip) Introduction of IIOT features to TS 37.340 Huawei, HiSilicon CR Rel-16 37.340 16.1.0 0195 3 B NR\_IIOT-Core

* [059] Agreed

[R2-2005162](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005162.zip) Stage-2 updates for IIOT Nokia, Nokia Shanghai Bell CR Rel-16 38.300 16.1.0 0215 1 F NR\_IIOT R2-2003170 Late

[R2-2005181](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005181.zip) Stage-2 updates for IIOT (36.300) Nokia, Nokia Shanghai Bell CR Rel-16 36.300 16.1.0 1280 1 F NR\_IIOT-Core R2-2003887 Late

* [059] Both Agreed

### 6.7.6 UE capabilities

Summary if needed and running 38306 CR by Nokia. Some Open points: FFS whether additional capability or related signalling is needed for joint EHC and ROHC operation. FFS: Revisit the discussion on the number of DRBs the UE shall support with Rel-16 PDCP duplication after the related issue for Rel-15 is clarified. FFS: Allow additional RLC entities to be configured for duplication without impacting the maximum number of DRBs. Discuss further the conditions for allowing additional RLC entities to be configured.

* [AT110-e][048][060][IIOT] UE capabilities (Nokia)

Scope: Treat R2-2004681, determine agreeable parts and and make agreements. Implement meeting agreements in updated CRs.

Part 1: Agreements (rapporteur sets the deadline)

Part 2: Endorsed CRs 38306 38331 36306 36331 (For merge, good Q cover sheet etc)

Deadline: June 11 0700 UTC

[R2-2006048](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006048.zip) Summary of Phase 1 of e-mail discussion: [AT110e][048][IIOT] UE capabilities (Nokia) Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_IIOT

* Introduce a capability for the UE to indicate whether it supports simultaneous configuration of EHC and RoHC for the same DRB.
* If the UE indicates support for RoHC and EHC, but does not indicate support for a new capability as proposed in Proposal Ph1-1, EHC and RoHC may be simultaneously configured for different DRBs.

[R2-2006295](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006295.zip) Summary of Phase 2 of e-mail discussion: [AT110e][048][IIOT] UE capabilities (Nokia) Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_IIOT

2-1

- MTK think the new LS from R1 might have changed this, as l1 cancellation is not supported. Vivo think cancellation is supported for CG CG collisions.

* Noted

[R2-2004681](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004681.zip) Summary of Tdocs on IIOT UE capabilities (AI 6.7.6) Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_IIOT Late

[R2-2004591](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004591.zip) Capability constraints on the number of DRBs in IIoT CATT discussion NR\_IIOT-Core

[R2-2004680](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004680.zip) UE feature list and capabilities remaining issues Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_IIOT

[R2-2004741](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004741.zip) Remaining issues on the UE capability of IIOT vivo discussion

[R2-2004779](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004779.zip) Supported Number of DRBs and RLC entities for R16 PDCP Duplication Enhancement Apple discussion Rel-16 NR\_IIOT-Core

[R2-2004963](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004963.zip) UE capability for IIoT Ericsson discussion NR\_IIOT-Core

[R2-2005069](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005069.zip) Discussion on requirements of the number of DRBs and RLC bearers Huawei, HiSilicon discussion Rel-16 NR\_IIOT-Core

[R2-2005128](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005128.zip) Configuration of the additional RLC entities Lenovo, Motorola Mobility discussion Rel-16

[R2-2005301](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005301.zip) Remaining issues in IIoT UE capability Intel Corporation discussion Rel-16 NR\_IIOT-Core

[R2-2005341](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005341.zip) Feasibility of additional RLC entities to be configured for duplication OPPO discussion Rel-16 NR\_IIOT-Core

[R2-2005507](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005507.zip) Relation between LCH-based and PHY-based prioritization LG Electronics Inc. discussion Rel-16 NR\_IIOT-Core

[R2-2005508](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005508.zip) Capability signaling for Joint EHC-ROHC operation LG Electronics Inc. discussion Rel-16 NR\_IIOT-Core

[R2-2005509](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005509.zip) Number of DRBs for duplication LG Electronics Inc. discussion Rel-16 NR\_IIOT-Core

[R2-2005651](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005651.zip) Remaining UE Capability Issues for IIOT Samsung discussion Rel-16 NR\_IIOT-Core

[R2-2005679](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005679.zip) Necessity of UE capability for simultaneous EHC and RoHC NTT DOCOMO INC. discussion Rel-16 NR\_IIOT-Core Late

[R2-2005153](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005153.zip) Discussion about remaining issues on scheduling enhancements Huawei, HiSilicon discussion NR\_IIOT-Core

[R2-2005335](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005335.zip) How to capture maximum number of SPS/CG per MAC OPPO, vivo discussion Rel-16 NR\_IIOT-Core

* [048] All tdocs on the group above are Noted

[R2-2004682](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004682.zip) Draft CR for IIOT capabilities introduction to TS 38.331 Nokia, Nokia Shanghai Bell draftCR Rel-16 38.331 16.0.0 B NR\_IIOT-Core

=> Revised in R2-2006293

R2-2006293 Draft CR for IIOT capabilities introduction to TS 38.331 Nokia, Nokia Shanghai Bell draftCR Rel-16 38.331 16.0.0 B NR\_IIOT-Core

* [048] Endorsed, to be merged UE caps

[R2-2005183](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005183.zip) UE radio access capabilities introduction for NR IIOT WI Nokia, Nokia Shanghai Bell draftCR Rel-16 38.306 16.0.0 B NR\_IIOT R2-2003885 Late

* [048] Endorsed, to be merged UE caps

[R2-2004683](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004683.zip) IIOT capabilities introduction to TS 36.331 Nokia, Nokia Shanghai Bell CR Rel-16 36.331 16.0.0 4299 - B NR\_IIOT-Core

=> Revised in R2-2006294

R2-2006294 IIOT capabilities introduction to TS 36.331 Nokia, Nokia Shanghai Bell CR Rel-16 36.331 16.0.0 4299 1 B NR\_IIOT-Core

* [048] Agreed

[R2-2005158](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005158.zip) UE radio access capabilities introduction for IIOT WI Nokia, Nokia Shanghai Bell CR Rel-16 36.306 16.0.0 1758 1 B NR\_IIOT-Core R2-2003884 Late

* [048] Agreed

## 6.8 NR Positioning Support

(NR\_pos-Core; leading WG: RAN1; REL-16; started: Mar 19; target; Jun 20; WID: RP-200218, SR: RP-200217). Documents in this agenda item will be handled in a break out session

Time budget: 1 TU

### 6.8.1 Organisational

Including incoming LSs, rapporteur inputs, etc.

[R2-2004319](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004319.zip) Reply LS on Local NR positioning in NG-RAN (S2-2003341; contact: Nokia) SA2 LS in Rel-16 5G\_eLCS To:RAN Cc:RAN3, RAN2

[R2-2004332](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004332.zip) LS on support for UL NR E-CID (R3-202646; contact: Nokia) RAN3 LS in Rel-16 NR\_pos-Core To:RAN1, RAN2

[R2-2004333](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004333.zip) LS on support for Area Scope in Assistance Information metadata (R3-202749; contact: Ericsson) RAN3 LS in Rel-16 NR\_pos-Core To:RAN2

[R2-2004376](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004376.zip) LS on NR Positioning gNB measurement report range and granularity (R4-2005841; contact: Intel) RAN4 LS in Rel-16 NR\_pos-Core To:RAN2, RAN3 Cc:RAN1

[R2-2004377](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004377.zip) LS on report mapping for UE positioning measurement (R4-2005839; contact: Huawei) RAN4 LS in Rel-16 NR\_pos-Core To:RAN2 Cc:RAN1, RAN3 Withdrawn

[R2-2004383](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004383.zip) LS on report mapping for UE positioning measurement (R4-2005839; contact: Huawei) RAN4 LS in Rel-16 NR\_pos-Core To:RAN2 Cc:RAN1, RAN3

[R2-2004635](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004635.zip) Introduction of UE capability for Positioning Ericsson draftCR Rel-16 38.331 16.0.0 B NR\_pos-Core

[R2-2004639](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004639.zip) Report Open issues on on-demand SI for positioning Ericsson report Rel-16

[R2-2004653](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004653.zip) Introduction of on-demand System Information functionality for Positioning Ericsson draftCR Rel-16 38.331 16.0.0 B NR\_pos-Core

### 6.8.2 Architecture and protocol aspects

No documents should be submitted to 6.8.2. Please submit to 6.8.2.x.

#### 6.8.2.1 Stage 2 corrections

Including impact to 36.305 and 38.305. Stage 2 corrections should be discussed with the specification rapporteur before submission.

This agenda item will utilize a summary document to facilitate treatment of topics during the e-meeting. (Huawei)

Tdoc limitation: 1 tdoc

[R2-2004517](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004517.zip) Missing SIB for positioning Nokia (Rapporteur) CR Rel-16 38.300 16.1.0 0227 - F NR\_pos-Core

[R2-2004638](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004638.zip) Text Proposal for on demand system information procedure Ericsson discussion Rel-16 38.305 NR\_pos-Core

[R2-2005094](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005094.zip) Corrections to stage-2 spec Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

[R2-2005103](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005103.zip) Summary of stage-2 AI 6.8.2.1 Huawei, HiSilicon discussion Rel-16 NR\_pos-Core Late

[R2-2005210](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005210.zip) Corrections to NR Positioning Qualcomm Incorporated CR Rel-16 38.305 16.0.0 0025 - F NR\_pos-Core

[R2-2005700](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005700.zip) SUL support for Rel-16 positioning purpose Samsung R&D Institute UK discussion

Withdrawn:

R2-2004727 Introduction of UL NR E-CID Intel Corporation CR Rel-16 38.305 16.0.0 0023 - F NR\_pos-Core

#### 6.8.2.2 RRC corrections

Including impact to 36.331 and 38.331. Issues for correction in RRC should be raised as class 3 issues in the ASN.1 review process. For accepted RIL issues, the proponent company can provide a discussion doc with an annex TP (if needed). Documents on issues outside the ASN.1 review (aside from email discussion summaries) may be deprioritised.

This agenda item will utilize a summary document to facilitate treatment of topics during the e-meeting. (Ericsson)

Including outcome of email discussion [Post109bis-e][950][POS] Remaining issues on broadcast (CATT)

[R2-2004637](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004637.zip) Solution for RIL E259 to remove cond on ServingCell ID Ericsson draftCR Rel-16 38.331 16.0.0 F NR\_pos-Core

[R2-2004707](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004707.zip) Broadcast of additional assistance data NextNav, AT&T, FirstNet, Intel, Polaris Wireless CR Rel-16 38.331 16.0.0 1508 1 C NR\_pos, NR\_pos-Core R2-2002598

[R2-2004708](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004708.zip) Removal of CSI-RS as pathloss reference for positioning SRS [M111] MediaTek Inc. discussion Rel-16 NR\_pos-Core

[R2-2004796](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004796.zip) Report of [Post109bis-e][950][POS] Remaining issues on broadcast (CATT) CATT discussion Rel-16 NR\_pos-Core

=> Revised in [R2-2006012](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006012.zip).

[R2-2006012](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006012.zip) Report of [Post109bis-e][950][POS] Remaining issues on broadcast (CATT) CATT discussion Rel-16 NR\_pos-Core

[R2-2005089](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005089.zip) DraftCR for SSB configuration in RRC spec Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

[R2-2005090](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005090.zip) DraftCR for introduction of new posSIB Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

[R2-2005091](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005091.zip) DraftCR for 38.331 on location measurement indication Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

[R2-2005093](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005093.zip) Discussion on SRS spitial relation configuration Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

[R2-2005095](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005095.zip) DraftCR for posSI-SchedulingInfo Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

[R2-2005096](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005096.zip) DraftCR for onDemand Positioning system information Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

[R2-2005097](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005097.zip) Correction on prohibit timer for SI request for positioning Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

[R2-2005098](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005098.zip) DraftCR for duplicated description for SI request for positioning Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

[R2-2005099](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005099.zip) Text proposal for positioning system information Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

[R2-2005100](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005100.zip) Draft CR the resourceType under SRS-PosResource Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

[R2-2005106](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005106.zip) Corrections to SSB configuration in RRC Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

[R2-2005316](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005316.zip) [E271] unicast tag for positioning posSI-BroadcastStatus Ericsson discussion Rel-16

[R2-2005394](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005394.zip) [N043] Location Measurement Indication updates for NR inter-frequency RSTD Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_pos-Core

[R2-2005714](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005714.zip) Summary for RRC Corrections for Positioning Ericsson discussion Rel-16 NR\_pos-Core Late

[R2-2005718](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005718.zip) Capturing RRC Positioning Impacts after RAN2-109bis Ericsson (Rapporteur) CR Rel-16 38.331 16.0.0 1592 1 F NR\_pos-Core R2-2003880

#### 6.8.2.3 LPP corrections

Issues for correction in LPP should be raised as part of the LPP ASN.1 review process. Documents on issues outside the ASN.1 review (aside from email discussion summaries) may be deprioritised.

This agenda item will utilize a summary document to facilitate treatment of topics during the e-meeting. (Intel)

Including outcome of email discussion [Post109bis-e][946][POS] Reference for additional path reporting (Ericsson)

Including outcome of email discussion [Post109bis-e][947][POS]TRP-ID structure (Ericsson)

Including outcome of email discussion [Post109bis-e][948][POS] LPP ASN.1 review (Qualcomm)

Including outcome of email discussion [Post109bis-e][949][POS] Structure of UE-based assistance data (Ericsson)

Including outcome of email discussion [Post109bis-e][951][POS] Remaining issues on UE-based positioning (Huawei)

[R2-2004460](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004460.zip) Editorial and other minor updates Spirent Communications CR Rel-16 37.355 16.0.0 0258 - F NR\_pos-Core

[R2-2004700](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004700.zip) Report on Structure of UE-based assistance data Ericsson report Rel-16

[R2-2004701](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004701.zip) Report on TRP-ID structure Ericsson report Rel-16

[R2-2004702](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004702.zip) Report on Reference for additional path reporting Ericsson report Rel-16

[R2-2004703](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004703.zip) Summary and Text Proposal Reference for additional path reporting Ericsson discussion Rel-16

[R2-2004704](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004704.zip) Summary and Text Proposal on TRP-ID structure Ericsson discussion Rel-16

[R2-2004705](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004705.zip) Summary and Text Proposal on Structure of UE-based assistance data Ericsson discussion Rel-16

[R2-2004730](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004730.zip) "summary of 6.8.2.3 LPP corrections" Intel Corporation discussion Rel-16 NR\_pos-Core Late

[R2-2005088](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005088.zip) DraftCR for SSB configuration in LPP spec Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

[R2-2005101](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005101.zip) Corrections on the positioning measurement report in 37.355 Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

[R2-2005104](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005104.zip) [Post109bis-e][951][POS] Remaining issues on UE-based positioning (Huawei) Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

[R2-2005105](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005105.zip) DraftCR on UE-based positioning Huawei, HiSilicon draftCR Rel-16 37.355 16.0.0 NR\_pos-Core

[R2-2005107](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005107.zip) Remaining issues in LPP Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

[R2-2005108](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005108.zip) Remaining issues in LPP ASN.1 Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

[R2-2005212](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005212.zip) Email discussion report: [Post109bis-e][948][POS] LPP ASN.1 review Qualcomm Incorporated discussion Late

[R2-2005213](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005213.zip) LPP Clean-Up Qualcomm Incorporated discussion Late

R2-2005215 LPP Clean-Up Qualcomm Incorporated CR Rel-16 37.355 16.0.0 0260 - F NR\_pos Late

[R2-2005305](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005305.zip) UL SRS UE Capability Ericsson discussion Rel-16 R2-2003137

R2-2006003 Email discussion report: [Post109bis-e][948][POS] LPP ASN.1 review Qualcomm Incorporated discussion Late

[R2-2006013](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006013.zip) Structure of UE-based beam information assistance data (Extension to email discussion 949) Ericsson discussion Rel-16 NR\_pos-Core Late

#### 6.8.2.4 MAC corrections

Including impact to 38.321.

Tdoc limitation: 1 tdoc

[R2-2004461](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004461.zip) Discussion on SRS for positioning during the DRX inactive period vivo discussion Rel-16 NR\_pos-Core

[R2-2004636](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004636.zip) Discussion and corrections for MAC CE Design for Positioning Ericsson discussion Rel-16

[R2-2005046](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005046.zip) Discussion on positioning SRS during DRX inactive period Spreadtrum Communications discussion

[R2-2005087](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005087.zip) Runnnig CR to MAC spec for R16 Positioning Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

[R2-2005092](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005092.zip) Remaining issues in MAC spec Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

[R2-2005211](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005211.zip) Corrections to Power Headroom Reporting for SRS for positioning Qualcomm Incorporated discussion

### 6.8.3 Other

Tdoc limitation: 1 tdoc

[R2-2005304](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005304.zip) DL PRS and UL SRS Coupling for UE Rx Tx measurements for NR positioning Ericsson discussion Rel-16

Withdrawn:

R2-2004797 UE capabilities on supporting positioning SRS during DRX inactive period CATT discussion Rel-16 NR\_pos-Core

## 6.9 NR mobility enhancements

(NR\_Mob\_enh-Core; leading WG: RAN2; REL-16; started: Jun 18; target; Mar 20; WID: RP-192277). Documents in this agenda item will be handled in a break out session

No documents should be submitted to 6.9. Documents under 6.9 will be treated together with documents in 7.3.

A web conference may be used for handling some of the discussions in this WI, and summary document may be provided for some agenda items under 6.9.

### 6.9.1 Organisational

Including incoming LSs, running CRs, rapporteur inputs, etc.

Including outcome of [Post109bis-e][927][NR MOB] Stage-2 CR (Intel).

[R2-2004355](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004355.zip) LS on Simultaneous reception of DL signals in intra-frequency DAPS HO (R1-2003058; contact: Intel) RAN1 LS in Rel-16 NR\_Mob\_enh-Core To:RAN4 Cc:RAN2

[R2-2004518](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004518.zip) Corrections to Mobility Enhancements Nokia, Intel Corporation (Rapporteurs) CR Rel-16 38.300 16.1.0 0211 2 F NR\_Mob\_enh-Core R2-2003857

[R2-2004662](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004662.zip) Corrections on NR mobility enhancements (109b-927) Intel Corporation CR Rel-16 38.300 16.1.0 0230 - F NR\_Mob\_enh-Core

[R2-2004670](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004670.zip) Corrections on NR mobility enhancements Intel Corporation CR Rel-16 38.331 16.0.0 1591 1 F NR\_Mob\_enh-Core R2-2003850

### 6.9.2 Conditional handover

This AI jointly addresses corrections to NR and LTE CHO.

All RRC-related corrections to CHO should be submitted to ASN.1 review agenda items in 6.9.5 (NR RRC) and 7.3.4 (LTE RRC).

Tdoc Limitation per company: 1 tdoc.

[R2-2004619](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004619.zip) Re-establishment initiation and CHO Ericsson discussion NR\_Mob\_enh-Core

[R2-2004914](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004914.zip) Correction on CHO failure handling OPPO CR Rel-16 38.300 16.1.0 0234 - F NR\_Mob\_enh-Core

[R2-2005344](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005344.zip) On stopping evaluating execution condition once triggering the legacy HO ZTE Corporation, Sanechips discussion Rel-16 NR\_Mob\_enh-Core

[R2-2005380](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005380.zip) Discussion on leftovers for CHO Huawei, HiSilicon discussion Rel-16 LTE\_feMob-Core, NR\_Mob\_enh-Core R2-2003577

[R2-2005456](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005456.zip) Further consideration on CHO in MR-DC operation CMCC discussion Rel-16 NR\_Mob\_enh-Core

[R2-2005681](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005681.zip) Stage 2 CR for CHO Evaluating Handling during Legacy HO LG Electronics Inc. CR Rel-16 38.300 16.1.0 0242 - F NR\_Mob\_enh-Core

### 6.9.3 Conditional PSCell change for intra-SN

Including corrections for CPC.

Including outcome of [Post109bis-e][929][NR MOB] Stage-2 CR for CPC (CATT)

Tdoc Limitation per company: 1 tdoc

[R2-2004620](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004620.zip) Remaining issues for conditional PSCell change Ericsson discussion NR\_Mob\_enh-Core

[R2-2005071](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005071.zip) Introduction of Conditional PSCell Change for intra-SN without MN involvement CATT draftCR Rel-16 37.340 16.1.0 F NR\_Mob\_enh-Core Late

[R2-2005279](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005279.zip) Corrections on procedure for CPC complete Futurewei discussion Rel-16 NR\_Mob\_enh-Core

[R2-2005345](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005345.zip) Remaining issues for CPC ZTE Corporation, Sanechips discussion Rel-16 NR\_Mob\_enh-Core

[R2-2005381](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005381.zip) Discussion on leftovers for CPC Huawei, HiSilicon discussion Rel-16 LTE\_feMob-Core, NR\_Mob\_enh-Core

[R2-2005457](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005457.zip) Discussion on the maxinum CPC candidates CMCC discussion Rel-16 NR\_Mob\_enh-Core

[R2-2005683](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005683.zip) Draft CR for Clarification to release CPC when SCG Release LG Electronics Inc. draftCR Rel-16 38.331 16.0.0 F NR\_Mob\_enh-Core

### 6.9.4 UE capabilities for conditional handover, fast handover failure recovery and conditional PSCell change

This AI jointly addresses UE capabilities for features in the NR mobility WI (i.e. DAPS, CHO, CPC, T312). Any input on UE capabilities from RAN1/4 will be handled in this agenda item.

Including outcome of [Post109bis-e][930][NR MOB] UE capabilities for NR mobility (Intel).

Tdoc Limitation per company: 1 tdoc

[R2-2004663](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004663.zip) [109b#930] UE capabilities for NR mobility Intel Corporation discussion Rel-16 NR\_Mob\_enh-Core

[R2-2004664](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004664.zip) UE Capability for Rel-16 NR mobility enhancement Intel Corporation draftCR Rel-16 38.331 16.0.0 F NR\_Mob\_enh-Core

[R2-2004665](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004665.zip) UE Capability for Rel-16 NR mobility enhancement Intel Corporation draftCR Rel-16 38.306 16.0.0 F NR\_Mob\_enh-Core

[R2-2004917](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004917.zip) Discussion on UE capability for CHO and CPC OPPO discussion Rel-16 NR\_Mob\_enh-Core

[R2-2005061](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005061.zip) Discussion on UE capabilities for NR DAPS Huawei, HiSilicon discussion Rel-16 NR\_Mob\_enh-Core

[R2-2005160](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005160.zip) UE capabilities for Mobility Enhancements WI Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_Mob\_enh-Core

[R2-2005684](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005684.zip) Consideration on Conditional mobility capability LG Electronics Inc. discussion Rel-16 NR\_Mob\_enh-Core R2-2002902

### 6.9.5 ASN.1 review of mobility WIs for NR RRC

This agenda item focuses on NR RRC aspects of NR mobility W – LTE RRC aspects of both LTE and NR mobility WIs should be submitted to 7.3.4. Do not submit contributions on WI-specific open issues that are not captured in the current NR RRC to this agenda item.

All ASN.1 issues should be raised in RILs first – contributions where no RIL issue exists may not be treated.

Including contributions/TPs on RRC corrections based on review issues. For these, no individual company CRs should be submitted: please consult with the rapporteur of NR RRC CR first (yi.guo@intel.com).

[R2-2004427](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004427.zip) Clarification on tag-Config for DAPS (subject to [H223]) Samsung discussion Rel-16 NR\_Mob\_enh-Core

[R2-2004661](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004661.zip) Phase 1 class 2 issues on MOB WI (I101, I103, I104, I105, I107, I109, I100, S303, I111) Intel Corporation discussion Rel-16 NR\_Mob\_enh-Core

[R2-2004666](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004666.zip) Phase 1 open issue on DAPS CP (S350, I112) Intel Corporation discussion Rel-16 NR\_Mob\_enh-Core

[R2-2004667](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004667.zip) Phase 1 open issue on CHO (I113) Intel Corporation discussion Rel-16 NR\_Mob\_enh-Core

[R2-2004668](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004668.zip) Phase 1 Open issue on CPC (Z255) Intel Corporation discussion Rel-16 NR\_Mob\_enh-Core

[R2-2004672](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004672.zip) Phase 2 MOB RIL issues Intel Corporation discussion Rel-16 NR\_Mob\_enh-Core Late

[R2-2004693](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004693.zip) [E232] Source and target entities at DAPS HO Ericsson discussion Rel-16 NR\_Mob\_enh-Core

[R2-2004915](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004915.zip) [O201] Correction on dapsConfig OPPO discussion Rel-16 NR\_Mob\_enh-Core

[R2-2005062](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005062.zip) [S350] Discussion on reconfiguration procedure in DAPS Huawei, HiSilicon discussion Rel-16 NR\_Mob\_enh-Core

[R2-2005064](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005064.zip) [I112] discussion on RLC re-establishment upon fallback Huawei, HiSilicon discussion Rel-16 NR\_Mob\_enh-Core

[R2-2005065](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005065.zip) [I113] Discussion on handling CHO candidate cells upon RRC re-establishment Huawei, HiSilicon discussion Rel-16 NR\_Mob\_enh-Core

[R2-2005134](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005134.zip) [B105] TP for DAPS handover with fast MCG link recovery Lenovo, Motorola Mobility discussion Rel-16

[R2-2005346](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005346.zip) [Z276] Discussion on UE configuration release in RRC re-establishment ZTE Corporation, Sanechips discussion Rel-16 NR\_Mob\_enh-Core

[R2-2005347](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005347.zip) [Z277] Discussion on stopping conditional reconfiguration evaluation during fast MCG recovery ZTE Corporation, Sanechips discussion Rel-16 NR\_Mob\_enh-Core

[R2-2005348](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005348.zip) [Z255] Further discussion on the handling of stored CPC configuration ZTE Corporation, Sanechips discussion Rel-16 NR\_Mob\_enh-Core

[R2-2005382](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005382.zip) [C003] T312 discussion Huawei, HiSilicon discussion Rel-16 NR\_Mob\_enh-Core

[R2-2005383](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005383.zip) [H458] Triggering quantity discussion Huawei, HiSilicon discussion Rel-16 NR\_Mob\_enh-Core

[R2-2005430](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005430.zip) [J030, J031] UE DAPS configuration release upon RLF SHARP discussion Rel-16 NR\_Mob\_enh-Core

[R2-2005511](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005511.zip) [G103] Clarification on CHO handling during RRC connection re-establishment procedure Google Inc. draftCR Rel-16 38.331 16.0.0 F NR\_Mob\_enh-Core

[R2-2005512](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005512.zip) [J033] RoHC handling with and without key change at the UE SHARP Corporation discussion Rel-16 LTE\_feMob-Core R2-2003665

[R2-2005529](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005529.zip) [G104] Clarification on DAPS handover failure while the T310 is running Google Inc. discussion 38.331 NR\_Mob\_enh-Core

[R2-2005668](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005668.zip) [S304] Clarification on applicable cell in CHO Samsung R&D Institute UK discussion

[R2-2005708](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005708.zip) [S350] Discussion on radio bearer handling during DAPS Samsung Electronics discussion NR\_Mob\_enh-Core

[R2-2005997](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005997.zip) TP on DAPS terminology related ASN.1 review issues (ao Z258) Samsung Telecommunications draftCR Rel-16 36.331 16.0.0 TEI16

### 6.9.6 Other

Only corrections not fitting other agenda items.

Including DAPS aspects that are NR-specific without equivalent LTE impacts: Do not use this AI for any DAPS topics that can be discussed jointly for LTE and NR - Contributions on DAPS that apply for both LTE and NR are treated jointly in under 7.3.2.

Tdoc Limitation per company: 1 tdoc.

[R2-2004698](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004698.zip) RoHC handling during DAPS handover without key change Ericsson discussion Rel-16 NR\_Mob\_enh-Core R2-2002589

[R2-2005056](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005056.zip) Discussion on ROHC handling in DAPS HO without key change Huawei, HiSilicon discussion Rel-16 NR\_Mob\_enh-Core

[R2-2005682](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005682.zip) CHO Evaluating Handling during Legacy HO LG Electronics Inc. discussion Rel-16 NR\_Mob\_enh-Core

## 6.10 DC and CA enhancements

(LTE\_NR\_DC\_CA\_enh-Core; leading WG: RAN2; REL-16; started: Jun 18; target; Jun 20; WID: RP-192336, SR: RP-200319, see also guidance in RP 192326)

Time budget: 2 TU

Tdoc Limitation: 4 tdocs

### 6.10.1 General

Including incoming LSsrapporteur inputs, etc

Including functionality discussions going beyond a specific TS, cross group discussions.

**New Incoming LSes**

[R2-2006130](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006130.zip) Response LS on clarification of UE requirements for early measurement performance and reporting (R4-2009116; contact: Ericsson) Rel-16 LTE\_NR\_DC\_CA\_enh-Core RAN2

- R4 has set limits and explain that they will define some additional UE capabilities. UE cap can be taken into account when R4 feature list has been updated and include the new UE Cap.

- Huawei wonder about the nature of the capablity. Ericsson think it is a dependent but additional UE cap.

* Noted, no impact to TS

[R2-2006131](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006131.zip) LS to RAN2 on RRM Enhanced Measurement Reporting (R4-2009121; contact: Nokia) Rel-16 LTE\_NR\_DC\_CA\_enh-Core RAN2

- Nokia think that the current note means that when EMR is configured then the S-nonintrasearsh threshold are not applicable, i.e. option 1.

- QC think we need to discuss more.

- Ericsson also think option 1. MTK agrees with Ericsson and Nokia procedure wise, but think that we should just reply that both option 1 and option 2 are consistent with the NOTE agreed by R2. MTK think that in Rel-15 these are combined when determining requirements.

- Nokia think Option 2 is contradicting to R2 agreement.

- Huawei think Option 1 contradicts R2 agreements.

- Intel think we should remove the ref to carrier. QC would be ok with this and think we could also state that R15 principles should be followed, Samsung think we don’t need to remove, we can state

- OPPO think the UE shall ignore the thresholds.

- Nokia propose the clarify that R2 didn’t intend to impact other measurments

* R2 intended that Search thresholds (*s-NonIntraSearchP* and *s-NonIntraSearchQ*) do not apply to EMR measurements performed on carriers configured for EMR measurements.
* Reply LS in R2-2006287, copying the agreement above as reply to R4 to take into account, which is approved unseen.

[R2-2006135](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006135.zip) Reply LS to RAN2 on dormant BWP (R4-2009245; contact: Futurewei) Rel-16 LTE\_NR\_DC\_CA\_enh-Core RAN2, RAN1

- R4 takes a position explaining that P-SRS with long period is beneficial.

- Nokia think this don’t change anything this was taken into account already.

- Huawei think that R4 raises this for TDD specifically and for TDD is might be eaiser.

- OPPO think discussions on configuration is needed if we agree to change and this cannot be concluded now, so this can be considerd in Rel-17

- CATT think indeed R2 considered this beneficial but anyway decided to not go ahead in R16. Think we should keep the decision. Samsung agrees.

- LG would be ok with P-SRS but think R2 may not finish in this meeting.

- Chair: It seems this doesn’t really change the situation. R2 already acknowleged that there are benefits but anyway decided to not do this in R16. So as positions seems non-changed the current decision stays. It seems however that as R4 agreed on benefits there are indeed significant support to have this, so maybe it should be in R17.

* Noted

R2-2005266 CR for 36.331 for CA/DC Enhancements Ericsson CR Rel-16 36.331 16.0.0 4309 - F LTE\_NR\_DC\_CA\_enh-Core Late

R2-2005267 CR for 38.331 on CA/DC Enhancements Ericsson CR Rel-16 38.331 16.0.0 1660 - F LTE\_NR\_DC\_CA\_enh-Core Late

R2-2005268 CR for 36.300 for CA/DC Enhancements Ericsson CR Rel-16 36.300 16.1.0 1285 - F LTE\_NR\_DC\_CA\_enh-Core Late

R2-2005269 CR for 38.300 for CA/DC Enhancements Ericsson CR Rel-16 38.300 16.1.0 0238 - F LTE\_NR\_DC\_CA\_enh-Core Late

R2-2006349 CR for 36.331 for CA/DC Enhancements Ericsson (Rapporteur) CR Rel-16 36.331 16.0.0 4260 2 F LTE\_NR\_DC\_CA\_enh-Core

R2-2006350 CR for 38.331 for CA/DC Enhancements Ericsson (Rapporteur) CR Rel-16 38.331 16.0.0 1557 2 F LTE\_NR\_DC\_CA\_enh-Core

### 6.10.2 UE capabilities

Summary if needed by Huawei

* [AT110-e][074][DCCA] UE capabilities (Huawei)

Scope: Treat documents under 6.10.2, determine agreeable parts and and make agreements. Implement meeting agreements in updated CRs.

Part 1: Agreements (rapporteur sets the deadline)

Part 2: Endorsed CRs 38306 38331 36306 36331 (For merge, good Q cover sheet etc)

Deadline: June 11 0700 UTC

[R2-2006266](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006266.zip) Summary of [AT110-e][074][DCCA] UE capabilities (Huawei) Huawei

DISCUSSION

- Ericsson think we should remove the capability for early measurements as R4 may update this part. Huawei and QC think the R4 capability is just an additional capability and would not impact the current capability could be kept. MTK agrees.

- Chair: We keep the early measurement capability in the CR, assume it is in principle different to the R4 capability on beam measurements.

P2

- Nokia would be ok to comproise

P3

- ZTE are ok to split MCG and SCG, but think that is P4 is agreed we will have 10 UE caps for SCell activation.

- Nokia are ok after some explanation.

- OPPO think directSCellActivationresume for SCG there are several sub-cases. Huawei think that for any activation some SCG configuraition is anyway needed e.g. to provide SCell state, so thre shouldn’t be multiple cases.

P4

- QC think we need both differentiation FR1 FR2 and MCG SCG, and also IOT indication for the supported combination e.,g. FR1 MCG and FR2 SCG

P5

- Continue the discussion on UE capabilities on asynchronous NR-DC and supported cell-grouping configurations for a band combination of NR-DC in the email discussion on RAN1 capabilities.

- Nokia think there was agreeable outcome. Intel think that in R1 feature list there is no Asynchronous NR DC.

- QC think that R1 explicitly asked R2 to introduce UE cap for Asynch NR DC. Intel think we cannot decide without R1 decisions.

* For idle/inactive NR measurements (i.e. *endc-IdleInactiveMeasurements-r16* and *idleInactiveNR-MeasReport-r16*), distinguish FR1/FR2.
* For direct SCell activation, i.e. in 36.306 *directSCellActivationResume-r16* and in 38.306 *directSCellActivation-r16* and *directSCellActivationResume-r16*, define separate capabilities for MCG SCells and SCG SCells (of the same RAT).
* For direct SCell activation, i.e. in 38.306 *directSCellActivation-r16* and *directSCellActivationResume-r16*, distinguish FR1 SCells and FR2 SCells.

[R2-2005221](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005221.zip) Remaining issues of UE capability of Rel-16 DCCA enhancement Qualcomm Incorporated discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2005238](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005238.zip) Remain issues on UE capability for Edcca RAN2 features Huawei, HiSilicon discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

* [074] Both Noted

[R2-2005251](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005251.zip) Introduction of UE capabilities for eDCCA Huawei, HiSilicon CR Rel-16 36.306 16.0.0 1757 1 B LTE\_NR\_DC\_CA\_enh-Core R2-2003703 Late

[R2-2005252](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005252.zip) Introduction of UE capabilities for eDCCA Huawei, HiSilicon CR Rel-16 38.306 16.0.0 0293 1 B LTE\_NR\_DC\_CA\_enh-Core R2-2003704 Late

[R2-2005253](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005253.zip) Introduction of UE capabilities for eDCCA Huawei, HiSilicon CR Rel-16 36.331 16.0.0 4283 1 B LTE\_NR\_DC\_CA\_enh-Core R2-2003705 Late

[R2-2005254](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005254.zip) Introduction of UE capabilities for eDCCA Huawei, HiSilicon CR Rel-16 38.331 16.0.0 1580 1 B LTE\_NR\_DC\_CA\_enh-Core R2-2003706 Late

* Endorsed as pre-meeting baseline
* [Post110-e][074][DCCA] UE capabilities (Huawei)

Scope: Implement agreements from this meeting

Intended Outcome Endorsed CRs 38306 38331, Agreed CRs 36306 36331

Deadline: NR Endorsed CRs Tuesday extra Short: June 16 0800 UTC

Deadline: EUTRA Agreed CRs: Short

[R2-2005223](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005223.zip) Introduce capabilities on Async NR-DC and cell-grouping configuration Qualcomm Incorporated discussion LTE\_NR\_DC\_CA\_enh-Core

- QC think it would be ok to postpone.

- Chair: can be postponed so companies can think about it. Meanwhile please provide comments to CR author (Peng).

* Postpone

Not available

R2-2005255 Summary of [Post109bis-e][033][DCCA] UE capabilities CRs (Huawei) Huawei, HiSilicon discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core Late

R2-2005256 Summary of contributions on UE capabilities Huawei, HiSilicon discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core Late

Withdrawn:

R2-2004499 Capability issue for MR-DC vivo discussion

R2-2005250 Remaining issues for UE eDCCA capabilities for RAN2 features Huawei, HiSilicon discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

### 6.10.3 MAC Open Issues and Corrections

SCell dormancy, Asynch CA. No listed open issues. CR endorsed at last meeting.

* [AT110-e][050][DCCA] MAC updates (OPPO)

Scope: Treat documents under 6.10.3, determine agreeable parts and and make agreements. Implement meeting agreements in updated CRs.

Part 1: Agreements (rapporteur sets the deadline)

Part 2: Updated Agreed CR 38321

Deadline: June 11 0700 UTC

[R2-2006078](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006078.zip) Email report of [AT110e][050][DCCA] MAC updates (OPPO) OPPO discussion

[R2-2005241](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005241.zip) Remaining issues on SCell dormancy behaviour Huawei, HiSilicon discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2005280](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005280.zip) Resolve the issue with SRS for dormant SCell Futurewei discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2005363](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005363.zip) Consideration on dormant BWP LG Electronics Inc. discussion LTE\_NR\_DC\_CA\_enh-Core

* [050] Tdocs above are noted

[R2-2004582](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004582.zip) Corrections on dormant BWP operation OPPO, Nokia, Ericsson, Huawei CR Rel-16 38.321 16.0.0 0743 - F LTE\_NR\_DC\_CA\_enh-Core R2-2004183

=> Revised in R2-2006080

[R2-2006080](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006080.zip) Corrections on dormant BWP operation OPPO, Nokia, Ericsson, Huawei CR Rel-16 38.321 16.0.0 0743 1 F LTE\_NR\_DC\_CA\_enh-Core

* [050] Agreed

[R2-2004813](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004813.zip) Correction on CSI-RS measurement in dormant BWP MediaTek Inc. draftCR Rel-16 38.321 16.0.0 F LTE\_NR\_DC\_CA\_enh-Core

* [050] agreed, merged with MAC running CR

[R2-2004837](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004837.zip) MAC and dormant SCell configuration Nokia, Nokia Shanghai Bell discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

* [050] the first change is not necessary, it can be captured in RRC spec. The second and third changes are agreed and are captured in the MAC running CR.

[R2-2005623](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005623.zip) Correction on activating SCells into dormant or non-dormant BWP vivo CR Rel-16 38.321 16.0.0 0757 - F LTE\_NR\_DC\_CA\_enh-Core

* [050] Not pursued

Withdrawn

R2-2004390 Corrections on dormant BWP operation OPPO, Nokia, Ericsson, Huawei CR Rel-16 38.321 16.0.0 0737 - F LTE\_NR\_DC\_CA\_enh-Core Withdrawn

### 6.10.4 RRC Open Issues and Corrections

Corrections, Class 3 RIL issues. For accepted RIL issues, the proponent company may provide a discussion doc with annex TP (if needed) that do not count towards the tdoc limitation. Contributions should be reserved for more complicated issued and minor issues are expected to be resolved in RRC email discussions or by CR rapporteur without any tdoc.

* [AT110-e][051\_A][DCCA] RRC 36331 38331 (Ericsson)

Scope: Adress relevant Review Issues (RILs), with or without tdocs, determine agreeable parts and and make agreements. Implement RIL solutions and DCCA Meeting agreements in updated CRs.

Part 1: Agreements (rapporteur sets the deadline)

Part 2: Agreed CRs 38331 36331 Deadline: EOM

* [Post110-e][051\_A][DCCA] RRC 36331 38331 (Ericsson)

Scope: Continue and conclude discussion on issues. Take meeting agreements into account, also other groups R1 R3

Intended Outcome: Agreed CRs 38331 36331

Deadline: Short

DC

[R2-2005247](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005247.zip) [36.331][H301] TP to promote TDM-PatternConfig to a global IE Huawei, HiSilicon discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core Late

[R2-2004492](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004492.zip) RIL#v021 The submission of the embedded RRCReconfigurationComplete vivo discussion

[R2-2004493](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004493.zip) CR for RIL021 The submission of the embedded RRCReconfigurationComplete vivo CR Rel-16 38.331 16.0.0 1609 - F NR\_newRAT-Core

RRC Resume

[R2-2005249](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005249.zip) [38.331][H315] TP to promote MRDC-SecondaryCellGroup to a global IE Huawei, HiSilicon discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core Late

[R2-2005638](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005638.zip) Clarification on Inactive AS context update in LTE LG Electronics Inc. discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2005276](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005276.zip) [E930] conditional presence of mobilityControlInfoSCG/scg-ConfigPartSCG for resuming with NE-DC (36.331) Ericsson CR Rel-16 36.331 16.0.0 4313 - F LTE\_NR\_DC\_CA\_enh-Core Late

[R2-2005604](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005604.zip) [Z312]Correction on upperlayerIndication in RRC resume procecedure ZTE Corporation, Sanechips discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core Late

Fast MCG Link Recovery – IRAT HO

[R2-2005171](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005171.zip) [E053] Correction to DL information transfer MR-DC Ericsson draftCR Rel-16 38.331 16.0.0 F LTE\_NR\_DC\_CA\_enh-Core Late

[R2-2004838](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004838.zip) C122, C123, C124 and C150 - TPs for inter-RAT handover via SRB3 upon MCG failure recovery Nokia, Nokia Shanghai Bell discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2004869](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004869.zip) [C122][C123] Correction to Support Inter-RAT Handover for MCG Fast Reovery CATT draftCR Rel-16 38.331 16.0.0 F LTE\_NR\_DC\_CA\_enh-Core

[R2-2004870](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004870.zip) [C150][C151] Correction to Support Inter-RAT Handover for MCG Fast Reovery CATT draftCR Rel-16 36.331 16.0.0 F LTE\_NR\_DC\_CA\_enh-Core

[R2-2005291](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005291.zip) Introducing support for IRAT mobility upon fast MCG recovery (C122, C123) Samsung Telecommunications draftCR Rel-16 38.331 16.0.0 LTE\_NR\_DC\_CA\_enh-Core

[R2-2005639](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005639.zip) Remaining issue on inter-RAT HO LG Electronics Inc. discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

Fast MCG Link Recovery – Other

[R2-2005687](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005687.zip) [38.331][H313][H323][H302] Corrections to MCG fast recovery Huawei, HiSilicon discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core Late

[R2-2005688](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005688.zip) [36.331][C150][C151] Corrections to MCG fast recovery Huawei, HiSilicon discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core Late

Direct Scell Activation

[R2-2005605](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005605.zip) [C121]Correction on direct SCell activation procedure ZTE Corporation, Sanechips discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core Late

[R2-2005242](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005242.zip) [38.331][Flagged C121] SCell state configuration for handover case Huawei, HiSilicon discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core Late

Scell Dormancy

[R2-2004894](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004894.zip) [C141] Correction on the Structure of Configuration of Dormant BWP CATT draftCR Rel-16 38.331 16.0.0 F LTE\_NR\_DC\_CA\_enh-Core Late

[R2-2005244](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005244.zip) [38.331][H303][H304][H316][C125] Correction on dormant BWP Huawei, HiSilicon discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core Late

[R2-2005606](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005606.zip) [Z305]Correction on need condition of first non-dormant BWP ZTE Corporation, Sanechips discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core Late

Early Measurements – Reporting

[R2-2005273](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005273.zip) [E924] Clarification regarding the sending of idle/inactive measurements (36.331) Ericsson CR Rel-16 36.331 16.0.0 4310 - F LTE\_NR\_DC\_CA\_enh-Core Late

[R2-2005537](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005537.zip) Measurement results handling upon reporting LG Electronics Inc. discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2005274](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005274.zip) [E923] Clarification regarding carrier prioritization during measurement reporting (36.331) Ericsson CR Rel-16 36.331 16.0.0 4311 - F LTE\_NR\_DC\_CA\_enh-Core Late

Early Measurements - Need Code and field description

[R2-2005275](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005275.zip) [E925][E926][E927] Missing field descriptions and need codes for idle/inactive measurement (36.331) Ericsson CR Rel-16 36.331 16.0.0 4312 - F LTE\_NR\_DC\_CA\_enh-Core Late

[R2-2005272](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005272.zip) [E215][E216][E217][E218][E219] Missing field descriptions and need codes for IEs related to idle/inactive measurement (38.331) Ericsson CR Rel-16 38.331 16.0.0 1663 - F LTE\_NR\_DC\_CA\_enh-Core Late

[R2-2005607](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005607.zip) [E215] Need code for IEs within SSB-MeasConfig ZTE Corporation, Sanechips discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core Late

[R2-2004868](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004868.zip) [E215] Need codes for IEs in ssb-MeasConfig of MeasIdleCarrierNR CATT discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2004541](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004541.zip) Remaining issues of NR early measurements China Unicom discussion LTE\_NR\_DC\_CA\_enh-Core

[R2-2005243](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005243.zip) [38.331][H319] TP to populate all fields of early measurement report Huawei, HiSilicon discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core Late

[R2-2005245](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005245.zip) [36.331][H308] TP to populate all fields of early measurement report Huawei, HiSilicon discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core Late

[R2-2005246](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005246.zip) [36.331][E927] Need code of ss-RSSI-Measurement-r16 Huawei, HiSilicon discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core Late

[R2-2005248](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005248.zip) [38.331][H309] TP for underscribed fields of ssb-Config-r16 Huawei, HiSilicon discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core Late

Early Measurements – Other

R2-2005716 [B001] Adding missing condition for releasing measIdleConfig Lenovo, Motorola Mobility discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2004895](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004895.zip) [C140]Correction to separate checking validity area and updating onfiguration CATT draftCR Rel-16 38.331 16.0.0 F LTE\_NR\_DC\_CA\_enh-Core Late

[R2-2004389](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004389.zip) Open issues for early measurement OPPO discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2005498](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005498.zip) [G100] Clarification on system information handling for early measurement Google Inc. draftCR Rel-16 38.331 16.0.0 F LTE\_NR\_DC\_CA\_enh-Core

* [051\_A] All 36 tdocs above are Noted

Not available

R2-2005114 [H200] Handling of dormancy configuration Ericsson discussion Late

#### 6.10.4.1 NR-NR Dual Connectivity

Including outcome of email discussion [Post109bis-e][926][DCCA] Uplink power control for NR-NR Dual-Connectivity (Apple)

Treat Online

[R2-2004329](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004329.zip) Reply LS on TDD pattern exchange for NR-DC power control (R3-202557; contact: vivo) RAN3 LS in Rel-16 LTE\_NR\_DC\_CA\_enh-Core To:RAN2 Cc:RAN1

* Noted

[R2-2004776](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004776.zip) Email Report of [Post109bis-e][926][DCCA] UL PC for NR-DC Apple discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

DISCUSSION

- Nokia has comments on P2, and think there is no re-negotiaion. Apple think this is current procedure. QC agrees this is current procedure. Nokia just want clarity and think that “SN can reject the procedure” is clear. P4 can cover more details. With this clarification Nokia would be ok. Ericsson think the reject is already clear in the TS, but we can clarify that to R1. CATT agrees.

- Ericsson think tha R1 need to choose which solution to use. And there are some comments on the TP

- CATT wonder what is P3, Apple think this might be implementation. CATT wonder if this is a new parameters. Apple think it is the same parameter, but a new parameter would be better. ZTE think same parameter works and is better. QC think we don’t need to specify a new IE but we could.

- ZTE think that for modification fail and reattempmt means renegoation.

- Huawei think tha at least for Sn addition SN need to accept / reject. Huawei agree with Ericsson that R1 decides on the solution, and value range etc. QC think we can decide.

- Tmobile US want to have this LS sent

* MN signals the maxToffset restriction (i.e. *maxToffset*) in *CG-ConfigInfo* to SN, and SN shall respect the restriction when deciding the SCG configuration, such that <= *maxToffset*.
* RAN2 understanding is that if SN cannot accept the maxToffset restriction set by MN, SN can at least reject the procedure. RAN2 companies assume that current procedures will be reused.
* RAN2 understanding is that upon receving and accepting maxToffset restriction from MN, SN can provide the actual maxToffsetSCG (e.g.) in IE requestedToffset according to the SCG configuration.
* SN may request, in CG-Config, a change in the maxToffset restriction imposed by MN. The SN may request MN to increase/decrease maxToffset and It is up to the MN to decide whether to and how to respond to the SN request.

[R2-2004777](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004777.zip) Draft LS Reply to RAN1 on UL PC for NR-DC Apple LS out Rel-16 LTE\_NR\_DC\_CA\_enh-Core To:RAN1

* Modify agreements 1-4 to reflect the wording above
* Remove “With the enhancement, MN can also have the knowledge of T\_offset for dynamic power sharing, and L1 UL power sharing scheme can work well.”
* Add in the end “RAN2 further understands that RAN1 will decide whether this solution shall be used, and if so, RAN2 would need information on value range”
* With these changes the LS is approved in R2-2006028

[R2-2004835](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004835.zip) NR DC power control Nokia, Nokia Shanghai Bell discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2005047](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005047.zip) Discussion on DC UL power control Spreadtrum Communications discussion

[R2-2005240](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005240.zip) TDD pattern exchange for NR-DC power control Huawei, HiSilicon discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

Withdrawn:

R2-2004775 SMTC Configuration for PSCell Addition for NR-DC Apple draftCR Rel-16 38.331 16.0.0 F LTE\_NR\_DC\_CA\_enh-Core Withdrawn

#### 6.10.4.2 Fast Scell activation

Treat Online First

**Chair: Open Issues**

Support (long periodicity) P-SRS or not

Default BWP could be dormant BWP or not (Reply to R4)

Implicit Config BFR RS for dormant BWP

Single or two first non-dormant DL BWP (R1 seems to have assumed two)

Trigger PHR while transitioning from dormancy to non-dormancy

* [AT110-e][052][DCCA] Fast Scell Activation (OPPO)

Scope: Address Open issues

Expected Outcome: Agreements

Deadline: June 5 0700 UTC

R2-2006079 Email report of [AT110e][052][DCCA] Fast Scell Activation (OPPO) OPPO discussion

DISCUSSION

- [052] Chair: on P1, as it is not only the most supported option but also the simplest it seems straight-forward to agree.

- [052] Chair: On P2, new PHR trigger was not unanimous, It is similar to other PHR triggers, but need to ask opponents to compromise.

* [052] to support implicit BFD-RS for dormant BWP,
* **no search space is configured in *PDCCH-Config* of dormant BWP but can apply *tci-StatesPDCCH-ToAddList* included in *ControlResourceSet*.**
* ***pdcch-ConfigCommon* is not configured on dormant BWP.**
* [052] New PHR trigger is supported due to BWP switching from dormancy to non-dormancy and the corresponding text is included in MAC CR.
  + - * Can also consider how to avoid redundant and frequent PHR reporting.
* [052] RAN2 to confirm that, for TDD, DL BWP transition from non-dormancy to dormancy also requires UL BWP switching to the same *BWP-Id* as the one configured for the dormant BWP.

[R2-2004360](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004360.zip) LS response to dormant BWP configuration and related operation (R1-2003075; contact: OPPO) RAN1 LS in Rel-16 LTE\_NR\_DC\_CA\_enh-Core To:RAN2

Q1/Q2

- Nokia think that for Q1 and Q2 there are no R2 implications. Ericsson think there might be

Q3

- Do we re-evaluate our decision to not have SRS? Nokia think if we say yes to this there will be significant impact. FW think R1 had no consensus on the R2 decisions.

- Oppo think we shall stick with our desicion to not support A-CSI.

- FW think the long period SRS is a good trade-off, and think it can be implemented without large impact.

- Intel think we asked wether R1 have seen issues with R2 agreements, there were no issues, and we don’t have time now to do more so late in the relase. LG think R2 can make agreement on SRS, R1 didn’t ask to support it. Samsung think there is nothing broken and prefer to stick with previous agreement. MTK agrees as well.

- Huawei think R1 said there is no issue with periodic SRS and think we don’t even need RRC change. ZTE also would like to support periodic SRS.

- Oppo also think R1 didn’t request SRS and think it is ok to leave to next release.

- FW would like to wait for R4 reply.

- Chair: There is some support to have P-SRS but there are also lots of concern that we will not be able to finish in R16.

Q4

- ZTE would like that we change to just have one. Have not seen any benefits of two. Oppo think both R2 TS and R1 TS assumes two non-dormant BWP. Nokia agrees with ZTE. MTK agrees as well, but think this is a R1 decision that we probably just have to accept. QC also don’t understand why there are two, but think it is too late to change now as it would require synch with R1

- Ericsson think they have different use cases, within and outside active time.

- LG think we should keep current design.

- Nokia point out that if WUS is configured then we need to configure also the outsideactivetime configuration.

Q5

- no issue

Q6

- shall we consider the implicit configuration of the beam failure detection RS for dormant BWP?

- QC think we should do this and it can be done very simply.

- Oppo Nokia CATT are ok to go this way, and work on the details offline.

- Huawei also support but think simplicity if very important.

Q7

- Nokia think we should not preclude this it should be up to the network. CATT agrees and see no issues with this. MTK agrees. ZTE agrees.

- Intel think that the UE need to transmit in the UL for default BWP, so there may be some cases that need discussion, so intel think we could do this in Rel-17. MTK think this is fallback behaviour for the PScell and can be avoided for SCell

- Oppo think it is better to not allow this. Futurewei agrees. LG agrees with FW and think timer based switch is inefficient. Ericsson has same understanding as Intel.

- Nokia think there is zero change, and we should also not make any change.

- Vivo think that it would be best if network is in control

* Confirm that dormant SCell don’t support SRS or A-CSI.
* Confirm that we stick with current design with two first non-dormant BWPs
* We support the implicit configuration of the beam failure detection RS for dormant BWP, details for offline discussion.
* We introduce limitation that default BWP can not be same as dormant BWP

[R2-2004371](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004371.zip) LS on SCell dormancy requirement scope (R4-2005424; contact: Ericsson) RAN4 LS in Rel-16 LTE\_NR\_DC\_CA\_enh-Core To:RAN2 Cc:RAN1

Reply Requested

* noted

[R2-2004384](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004384.zip) Open issues for dormant BWP operation OPPO discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2004385](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004385.zip) Draft Response LS on SCell dormancy requirement scope OPPO LS out Rel-16 LTE\_NR\_DC\_CA\_enh-Core To:RAN4

[R2-2004500](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004500.zip) New PHR trigger for dormancy Scell vivo discussion

[R2-2004501](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004501.zip) Remaining issue for dormancy Scell configuration vivo discussion

[R2-2005116](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005116.zip) Timer-based transitions for dormancy Ericsson discussion

[R2-2004809](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004809.zip) Finalize dormant BWP Qualcomm Incorporated discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2004814](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004814.zip) Discussion on timer based transitions for dormant BWP MediaTek Inc. discussion LTE\_NR\_DC\_CA\_enh-Core

[R2-2004815](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004815.zip) Reply LS on SCell dormancy requirement scope MediaTek Inc. LS out LTE\_NR\_DC\_CA\_enh-Core To:RAN4 Cc:RAN1

[R2-2004836](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004836.zip) Resolving RAN1 LS R1-2003075 on dormancy Nokia, Nokia Shanghai Bell discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2004865](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004865.zip) No SRS transmission for dormancy Samsung discussion LTE\_NR\_DC\_CA\_enh-Core

[R2-2004866](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004866.zip) Support of Implicit Configuration for BFR RS in Dormant BWP CATT draftCR Rel-16 38.331 16.0.0 F LTE\_NR\_DC\_CA\_enh-Core

[R2-2004867](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004867.zip) Discussion on Requirement of Timer-based transition for Dormancy and Non-dormancy CATT discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2004877](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004877.zip) PHR triggering condition for non-dormant BWP Samsung discussion LTE\_NR\_DC\_CA\_enh

[R2-2005115](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005115.zip) PHR triggering for dormant BWP Ericsson discussion

[R2-2005117](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005117.zip) TDD transition to dormant BWP Ericsson discussion

[R2-2005608](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005608.zip) Remaining issues of dormant BWP ZTE Corporation, Sanechips discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core Late

[R2-2005694](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005694.zip) Discussion on the necessity of supporting implicit BFD-RS in dormant BWP Qualcomm Incorporated, ZTE Corporation, Sanechips discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

=> Revised in [R2-2005715](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005715.zip)

[R2-2005715](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005715.zip) Discussion on the necessity of supporting implicit BFD-RS in dormant BWP Qualcomm Incorporated, ZTE Corporation, Sanechips discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2005118](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005118.zip) Draft reply LS on SCell dormancy requirement scope Ericsson LS out Rel-16 LTE\_NR\_DC\_CA\_enh-Core To:RAN4 Cc:RAN1

=> Revised in R2-2006255

[R2-2006255](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006255.zip) Draft reply LS on SCell dormancy requirement scope Ericsson LS out Rel-16 LTE\_NR\_DC\_CA\_enh-Core To:RAN4 Cc:RAN1

=> Revised in R2-2006318

[R2-2006318](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006318.zip) Reply LS on Scell dormancy requirement scope RAN2 LS out Rel-16 LTE\_NR\_DC\_CA\_enh-Core To:RAN4 Cc:RAN

* [052] Approved

Withdrawn:

R2-2004997 Remaining issue for dormancy Scell configuration vivo discussion

#### 6.10.4.3 Early measurement reporting

* [AT110-e][071][DCCA] New Cases (Huawei)

Scope: Treat R2-2004573, R2-2005239, R2-2005616, R2-2005629. Determine agreeable parts if any, and and make corresponding agreements.

Expected Outcome: Agreements

Deadline: June 5 0700 UTC

[R2-2006267](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006267.zip) Summary of [AT110-e][071][DCCA] New cases (Huawei) Huawei, HiSilicon

DISCUSSION

Early measurements and NR-U

- Ericsson support to include NR-U

- MTK think this has not been discussed before and think it brings some more discussion and R4 measuremnt requirements. MTK think this is not needed.

- LG think we don’t need to have RSSI etc so there is no impact to R2 specifications.

- Huawei think this could be ok if there is no impact on R2 TS and see no need to do the additional measurement. Huawei think *ssb-PositionQCL* may be mandatory for NR-U

- OPPO think we need to discuss if current spec is sufficient for NR-U.

- ZTE think this is for free, and think that precluding this would involve a change. But should not have P3. Nokia agrees.

- QC are ok with P1 but need to ensure that all parameters needed for NR-U idle parameters need to be included, but think there may be an effort for R4 and are not sure./

- Samsung think R2 impact is small, but R4 impact may be significant, and are not sure this should be supported. Intel agrees and think we don’t need this for R16

- Vivo are ok to have such feature, but think we should wait to R17 as it is late and there may be r4 impact.

- LG think we can support NR-U parameters as they are already in he signalling.

- QC think R4 are too busy, and they will conclude NR-U next meeting.

- Ericsson think we don’t need to forbid anything and we can see later whether anything is needed.

- Chair: There seems to be some interest and the main argument seems to be that there is no or very little impact in R2. There are also some concerns related impact in R4. Conclusion that we should not ask R4 to do any specific work for this or even ask questions on this for now. Thus we don’t explicity introduce support for EM for NR-U in R16. Can consider at later point in time whether anything need to be captured in the TS.

Early measurements and Network Sharing

- Nokia think P4 is ok, and dedicated signalling works. Ericsson agrees. CATT and LG also think an enhancement is not needed.

- Intel think that we have validity area.

- Huawei think we can clarify how it works. BT also wonder how this can work. ZTE also have doubts, and think we could have an email discussion for next meeting.

- Chair: EM seems to indeed work with network sharing, not much support to do enhancements. Could consider whether there is a need to clarify anything, and there is a request for email discussion.

- Chair: the email discussion to next meeting do not impact WI completion.

* We don’t explicitly introduce support for EM for NR-U in R16, i.e. we don’t ask R4 to work on this.
* Confirm the UE behaviour in the case that LTE SIB1 broadcasts several PLMNs:

If T331 is running and there is no carrier list in dedicated signalling, the UE is required to measure all NR carriers in SIB25 (because RAN4 agreed requirement is 8 NR carriers), even if carrier #X in SIB25 cannot be used if the UE has selected PLMN #Y in SIB1 (and indicates PLMN1 when it initiates connection establishment).

* [Post110-e][][DCCA] Early Measureemnts and Network Sharing (Huawei)

Scope: Clarify How Early Measureemnts work with Network Sharing. Determine the need for Corrections (if any).

Intended outcome: Report

Deadline: Long

New Cases

[R2-2004573](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004573.zip) Discussion on NR-U frequency in early measurement OPPO discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

* [071] Noted

[R2-2005239](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005239.zip) Using NR early measurements with network sharing Huawei, HiSilicon, BT CR Rel-16 36.331 16.0.0 4308 - C LTE\_NR\_DC\_CA\_enh-Core

* [071] Not Pursued for now

#### 6.10.4.5 Fast MCG link recovery

New Cases

[R2-2005616](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005616.zip) Introduction of transmitting NAS messages on SCG Google Inc. draftCR Rel-16 36.331 16.0.0 F LTE\_NR\_DC\_CA\_enh-Core

* [071] Not Pursued

[R2-2005629](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005629.zip) Introduction of transmitting NAS messages on SCG Google Inc. draftCR Rel-16 38.331 16.0.0 F LTE\_NR\_DC\_CA\_enh-Core

* [071] Not Pursued

#### 6.10.4.4 MCG SCell and SCG configuration with RRC resume

#### 6.10.4.6 Other

### 6.10.5 Stage-2 Corrections

* [AT110-e][073][DCCA] Stage-2 Updates (ZTE, vivo, Ericsson)

Agreed CRs 37340 (ZTE, vivo)

Deadline: EOM

DISCUSSION

- Ericsson explains that a NOTE was agreed for 38300, but it seems to not be sufficient, so an update in 5169 was seesm agreeable.

[R2-2006218](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006218.zip) Report of [AT110-e][073][DCCA] Stage-2 Updates Ericsson report

* See below desicions

[R2-2005169](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005169.zip) Clarification of DAPS configuration in MR-DC Ericsson CR Rel-16 38.300 16.1.0 0236 - F LTE\_NR\_DC\_CA\_enh-Core

[R2-2006216](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006216.zip) Clarification of DAPS configuration in MR-DC Ericsson CR Rel-16 38.300 16.1.0 0236 1 F LTE\_NR\_DC\_CA\_enh-Core

* agreed

[R2-2005170](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005170.zip) Clarification of DAPS configuration in MR-DC Ericsson CR Rel-16 37.340 16.1.0 0201 - F LTE\_NR\_DC\_CA\_enh-Core

[R2-2006217](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006217.zip) Clarification of DAPS configuration in MR-DC Ericsson CR Rel-16 37.340 16.1.0 0201 1 F LTE\_NR\_DC\_CA\_enh-Core

- LG doesn’t agree to this NOTE, but behaviour is ok. 38300 is enough. Lenovo agrees.

- Nokia think behaviour is ok and are ok with the Note

- Oppo think the wording is not correct as the release shall be done before DAPS handover, and thus 38300 is sufficient. Huawei agrees.

- Intel think we didn’t agree exactly when release is done, but it is captured that they cannot be configured at the same time.

- Chair: it seems only Ericsson think this need to be captured in 37340

* not agreed

[R2-2005640](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005640.zip) 37.340 CR for Supporting inter-RAT handover during fast MCG link recovery LG Electronics Inc. CR Rel-16 37.340 16.1.0 0206 - F LTE\_NR\_DC\_CA\_enh-Core

* Revised according to Qualcomm and LG comment [073], merged with the rapporteur CR (final agreement in Rapporteur CR)

[R2-2006014](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006014.zip) Support of asynchronous NR-DC ZTE Corporation (Rapporteur) CR Rel-16 37.340 16.1.0 0207 - B LTE\_NR\_DC\_CA\_enh-Core

- This is the rapporteur CR

- [073] to be Revised as follows: “NR-DC supports the case of no synchronization between PCell and PSCell. However, some UEs may support NR-DC only if slot-level synchronization between PCell and PSCell is ensured.”

R2-2006169 Support of asynchronous NR-DC ZTE Corporation (Rapporteur) CR Rel-16 37.340 16.1.0 0207 - B LTE\_NR\_DC\_CA\_enh-Core

* Contents is agreed, merge the other changes and check their final wording

[R2-2004502](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004502.zip) Capture latest agreements on fast MCG recovery vivo CR Rel-16 37.340 16.1.0 0200 - B LTE\_NR\_DC\_CA\_enh-Core

=> Revised in R2-2006024

[R2-2006024](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006024.zip) Capture latest agreements on fast MCG recovery vivo, Ericsson CR Rel-16 37.340 16.1.0 0200 1 B LTE\_NR\_DC\_CA\_enh-Core

* Revised according to the following changes: Note 2 is revised according to CATT suggestion [073], Note 3 is removed, merged with the rapporteur CR (final agreement in Rapporteur CR)

[R2-2006338](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006338.zip) DCCA corrections ZTE Corporation (Rapporteur), Ericsson, LG Electronics Inc., vivo CR Rel-16 37.340 16.1.0 0209 - F LTE\_NR\_DC\_CA\_enh-Core

* [073] Agreed

### 6.10.6 Other

## 6.11 UE Power Saving in NR

(NR\_UE\_pow\_sav-Core; leading WG: RAN1; REL-16; started: Mar 19; target; Jun 20; WID: RP-200494; SR: RP-200237, See also guidence in RP-192326). Documents in this agenda item will be handled in a break out session. NOTE: "SCell dormancy" like behaviour will be discussed in MR-DC WI.

Time budget: 1 TU

Tdoc Limitation: 2

### 6.11.1 Organisational

Including incoming LSs, running TS, rapporteur inputs, etc

NOTE: any stage 3 identified issues with MIMO configurations should be provided to 38.331 rapporteur (Mediatek)

Contributions in this AI are reserved for WI rapporteur inputs and/or spec rapporteur inputs and do not count towards the tdoc limits.

Including outcome of [Post109bis-e][941]PowSav] UE capabilities (Intel) No contributions expected for UE capabilities. Please provide your input to the email discussion. Intel is expected to produce first draft of 38.306

[R2-2004346](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004346.zip) Reply LS on DCP (R1-2002953; contact: Huawei) RAN1 LS in Rel-16 NR\_UE\_pow\_sav-Core To:RAN2

[R2-2004356](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004356.zip) Reply LS on DCP (R1-2003068; contact: CATT) RAN1 LS in Rel-16 NR\_UE\_pow\_sav-Core To:RAN2

[R2-2004366](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004366.zip) Reply LS on RRM relaxation in power saving (R4-2005331; contact: Huawei) RAN4 LS in Rel-16 NR\_UE\_pow\_sav-Core To:RAN2

[R2-2004551](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004551.zip) SRB3 for reporting UAI for power saving OPPO, MediaTek Inc. CR Rel-16 37.340 16.1.0 0189 1 F NR\_UE\_pow\_sav-Core R2-2002842

[R2-2004655](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004655.zip) Report of email discussion [Post109bis-e][941][PowSav] UE capabilities Intel Corporation discussion Rel-16 NR\_UE\_pow\_sav

[R2-2004656](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004656.zip) UE capabilities for Rel-16 Power Saving WI Intel Corporation CR Rel-16 38.306 16.0.0 0314 - B NR\_UE\_pow\_sav

[R2-2004657](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004657.zip) UE capabilities for Rel-16 Power Saving WI Intel Corporation CR Rel-16 38.331 16.0.0 1618 - B NR\_UE\_pow\_sav

### 6.11.2 User plane open issues

Including outcome of [Post109bis-e][938][PowSav] MAC open issues (Huawei)

Contributions related to issues addressed by the email discussions should be avoided and are discouraged for this AI.

All identified critical open issues should be provided to the rapporteur via email discussion Post109bis-e#938 and new contributions on those topics are discouraged. Contributions should be reserved for more complicated and critical issues.

No individual company CRs should be submitted

[R2-2004428](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004428.zip) Clarification on DCP configuration Samsung discussion Rel-16 NR\_UE\_pow\_sav-Core

[R2-2004642](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004642.zip) Remaining issues for DCP vivo discussion Rel-16 NR\_UE\_pow\_sav-Core

[R2-2004967](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004967.zip) Correction on RAR and DCP monitoring Nokia, Nokia Shanghai Bell draftCR Rel-16 38.321 16.0.0 F NR\_UE\_pow\_sav-Core R2-2002930

[R2-2005125](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005125.zip) Remaining issues on CSI report when DCP is configured ZTE, Sanechips discussion Rel-16 NR\_UE\_pow\_sav-Core

[R2-2005362](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005362.zip) Remaining issues on DCP LG Electronics Inc. discussion NR\_UE\_pow\_sav-Core

[R2-2005418](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005418.zip) Prioritization between DCP and RAR addressed to C-RNTI Samsung discussion NR\_UE\_pow\_sav-Core

[R2-2005610](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005610.zip) Report of email discussion [Post109bis-e][938][PowSav] MAC open issues Huawei report Rel-16 NR\_UE\_pow\_sav-Core Late

[R2-2005611](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005611.zip) MAC CR for Rel-16 UE power saving Huawei, HiSilicon, Nokia, Nokia Shanghai Bell CR Rel-16 38.321 16.0.0 0719 3 F NR\_UE\_pow\_sav-Core R2-2003975 Late

### 6.11.3 Control Plane open issues

Including outcome of [Post109bis-e][939][PowSav] RRC open issues (Mediatek)

Contributions related to issues addressed by the email discussions should be avoided and are discouraged for this AI.

All identified critical open issues should be provided to the rapporteur via email discussion Post109bise#939 and new contributions on those topics are discouraged. Contributions should be reserved for more complicated.

No individual company CRs should be submitted

[R2-2004558](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004558.zip) Remaining issues on UE assistance information OPPO discussion Rel-16 NR\_UE\_pow\_sav-Core

[R2-2004643](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004643.zip) Remaining issues for implicitly indicating SCG release preference (RIL v110) vivo discussion Rel-16 NR\_UE\_pow\_sav-Core

[R2-2004758](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004758.zip) Configurability aspect for Requested values in UE Assistance Information Apple discussion Rel-16 NR\_UE\_pow\_sav-Core

[R2-2004860](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004860.zip) UE assistance for connection release Ericsson, ZTE, Deutsche Telekom, NTT DOCOMO, INC., Vodafone, Verizon, InterDigital discussion Rel-16 NR\_newRAT-Core

[R2-2004871](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004871.zip) [C301] Considerations on the first reporting of UAI for power saving CATT discussion Rel-16 NR\_UE\_pow\_sav-Core

R2-2004943 CR for 38.331 for Power Savings MediaTek Inc. CR Rel-16 38.331 16.0.0 1540 1 C NR\_UE\_pow\_sav-Core R2-2003125 Late

R2-2004944 CR for 36.331 for Power Savings MediaTek Inc. CR Rel-16 36.331 16.0.0 4245 1 B NR\_UE\_pow\_sav-Core R2-2003126 Late

R2-2004945 Summary of [Post109bis-e][939][PowSav] RRC open issues MediaTek Inc. discussion Rel-16 NR\_UE\_pow\_sav-Core Late

[R2-2005145](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005145.zip) Power Saving UE assistance information Sony discussion Rel-16 NR\_UE\_pow\_sav-Core

[R2-2005405](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005405.zip) [H390] Discussion on search space configuration for DCP Huawei, HiSilicon discussion Rel-16 NR\_UE\_pow\_sav-Core

### 6.11.6 RRM measurement relaxation

Including out of [Post109bis-e][939][PowSav] RRC open issues (Mediatek)

Contributions related to issues addressed by the email discussions should be avoided and are discouraged for this AI.

All identified critical open issues should be provided to the rapporteur via email discussion Post109bis-e#939 and new contributions on those topics are discouraged. Contributions should be reserved for more complicated issued.

No individual company CRs should be submitted

[R2-2004444](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004444.zip) Report of [Post109bis-e][940][PowSav] RRM open issues vivo (rapporteur) discussion Rel-16 NR\_UE\_pow\_sav-Core Late

=> Revised in [R2-2006008](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006008.zip)

[R2-2006008](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006008.zip) Report of [Post109bis-e][940][PowSav] RRM open issues vivo (rapporteur) discussion Rel-16 NR\_UE\_pow\_sav-Core Late

[R2-2004445](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004445.zip) CR on 38.304 for UE Power saving in NR vivo CR Rel-16 38.304 16.0.0 0158 - B NR\_UE\_pow\_sav-Core Late

[R2-2004446](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004446.zip) Draft Reply LS to RAN4 on RRM measurement relaxation in power saving vivo LS out Rel-16 NR\_UE\_pow\_sav-Core To:RAN4

[R2-2004540](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004540.zip) Open issues Configurations for RRM Measurement Relaxation China Unicom discussion NR\_UE\_pow\_sav-Core

[R2-2004550](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004550.zip) Remaining issues on higher priority frequency measurements OPPO discussion Rel-16 NR\_UE\_pow\_sav-Core

[R2-2004562](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004562.zip) RRM Measurement Relaxation Behavior MediaTek Inc. discussion

[R2-2004594](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004594.zip) Configurations for inter-frequency RRM Measurement Relaxation NEC Corporation discussion

[R2-2004613](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004613.zip) Remaining issues for RRM measurement relaxation PANASONIC R&D Center Germany discussion

[R2-2004861](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004861.zip) Relaxed RRM measurements Ericsson discussion Rel-16 NR\_newRAT-Core

[R2-2005086](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005086.zip) Discussion on the RAN4 Reply LS on RRM relaxation Huawei, HiSilicon discussion Rel-16 NR\_UE\_pow\_sav-Core

[R2-2005139](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005139.zip) Clarification of the low mobility in relaxed measurement ZTE Corporation, Sanechips discussion Rel-16

[R2-2005140](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005140.zip) Discussion on higher priority frequency relaxation approach ZTE Corporation, Sanechips discussion Rel-16

[R2-2005536](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005536.zip) Remaining issues on relaxed meausrements LG Electronics Inc. discussion Rel-16 NR\_UE\_pow\_sav-Core

## 6.12 SON/MDT support for NR

(NR\_SON\_MDT-Core; leading WG: RAN3; REL-16; started: Jun 19; target; Mar 20; WID: RP-191776). Documents in this agenda item will be handled in a break out session

Time budget: 1 TU

No new additional function will be treated this meeting except the request is from RAN3.

### 6.12.1 Organisational

Including incoming LSs

[R2-2004303](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004303.zip) Reply LS on QoS monitoring for URLLC (R3-201372; contact: Intel) RAN3 LS in Rel-16 NR\_SON\_MDT To:SA5, SA2 Cc:RAN2, SA1, CT4

[R2-2004304](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004304.zip) LS on removal of Management Based MDT Allowed IE for NR (R3-201437; contact: Qualcomm) RAN3 LS in Rel-16 NR\_SON\_MDT To:RAN2, SA5

[R2-2004308](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004308.zip) Reply to LS to SA5 on trace related configurations for NR MDT (S5-201424; contact: Ericsson) SA5 LS in Rel-17 To:RAN2

[R2-2004309](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004309.zip) LS on the status update of the SON support for NR works (S5-201525; contact: Intel) SA5 LS in Rel-16 To:RAN2, RAN3

[R2-2004320](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004320.zip) Reply LS on QoS Monitoring for URLLC (S2-2003468; contact: Huawei) SA2 LS in Rel-16 5G\_URLLC To:RAN3 Cc:SA5, RAN2

[R2-2004327](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004327.zip) Reply LS on the feasibility of Received Interference Power measurement (R1-2002932; contact: Huawei) RAN1 LS in Rel-16 NR\_SON\_MDT-Core To:RAN2

[R2-2004331](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004331.zip) Reply LS on the status update of the SON support for NR works (R3-202630; contact: CMCC) RAN3 LS in Rel-16 NR\_SON\_MDT To:SA5 Cc:RAN2

[R2-2004334](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004334.zip) LS on information needed for MRO in UE RLF Report (R3-202818; contact: Samsung) RAN3 LS in Rel-16 NR\_SON\_MDT-Core To:RAN2

[R2-2004339](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004339.zip) Propagation of immediate MDT configuration in case of Xn inter-RAT HO (R3-202868; contact: ZTE) RAN3 LS in Rel-16 NR\_SON\_MDT-Core To:RAN2

[R2-2004340](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004340.zip) LS on Logged MDT Status (R3-202869; contact: Ericsson) RAN3 LS in Rel-16 NR\_SON\_MDT-Core To:RAN2

[R2-2004379](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004379.zip) Reply LS to LS on EN-DC related MDT configuration details (S5-202052; contact: Ericsson) SA5 LS in Rel-16 5GMDT To:RAN2 Cc:RAN3

[R2-2004724](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004724.zip) [Post109bis-e][961][MDTSON] SON open issues (Ericsson) Ericsson discussion

[R2-2004729](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004729.zip) [Draft] Response LS on the status update of the SON support for NR works Intel Corporation LS out Rel-16 NR\_SON\_MDT-Core To:SA5 Cc:RAN3

[R2-2005367](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005367.zip) Corrections on MDT and SON in NR Huawei, Ericsson, HiSilicon CR Rel-16 38.331 16.0.0 1669 - F NR\_SON\_MDT-Core

[R2-2005368](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005368.zip) Corrections on MDT and SON Huawei, Ericsson, HiSilicon CR Rel-16 36.331 16.0.0 4323 - F NR\_SON\_MDT-Core

[R2-2005454](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005454.zip) [Draft] Reply LS on MDT Configuration CMCC LS out Rel-16 NR\_SON\_MDT-Core To:RAN3

### 6.12.2 Essential input from RAN3

Focus on the request from R3-202818, R3-202869 and R3-202868. Discuss the TS changes to fulfill the agreements of RAN3. Discussion tdoc should be with an annex TP. For each company, only one contribution is allowed. Encourage interested companies combine and converge their work into one contribution.

[R2-2004412](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004412.zip) Discussion on RAN3 related concerns on MDT ZTE Corporation, Sanechips discussion Rel-16 NR\_SON\_MDT-Core

[R2-2004413](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004413.zip) Further Considerations and Modifications on MRO in UE RLF Report CATT, CMCC discussion Rel-16 NR\_SON\_MDT-Core

[R2-2004503](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004503.zip) TP on Management and signalling based MDT vivo draftCR Rel-16 37.320 16.0.0 NR\_SON\_MDT-Core

[R2-2004716](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004716.zip) On RAN3 related concerns Ericsson discussion

[R2-2005197](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005197.zip) Signaling based MDT priority in EN-DC Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_SON\_MDT

[R2-2005225](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005225.zip) Draft LS on Signalling based MDT priority in DC Nokia, Nokia Shanghai Bell LS out Rel-16 NR\_SON\_MDT-Core To:RAN3, SA5

[R2-2005369](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005369.zip) Discussion on incoming RAN3 LSs Huawei, HiSilicon discussion Rel-16 NR\_SON\_MDT-Core

[R2-2005455](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005455.zip) Propagation of MDT configuration in case of Xn inter-RAT HO CMCC discussion Rel-16 NR\_SON\_MDT-Core

R2-2006006 Summary of AI 6.12.2 Essential input from RAN3 Ericsson discussion Rel-16 NR\_SON\_MDT

Withdrawn:

R2-2005198 Draft LS on Signalling based MDT priority in DC Nokia, Nokia Shanghai Bell CR Rel-16 37.320 16.0.0 0084 - F NR\_SON\_MDT

### 6.12.3 TS37320 corrections

Each company, including the rapporteur, at most one contribution for this agenda. Encourage to contact 37.320 editor (Nokia) and WI rapporteur (CMCC) first. In general, the documents will be treated from guidance of them.

[R2-2004414](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004414.zip) Miscellaneous Corrections for 37.320 CATT discussion Rel-16 37.320 NR\_SON\_MDT-Core

[R2-2004673](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004673.zip) Handling of management-based MDT and signalling based MDT QUALCOMM Europe Inc. - Spain discussion Rel-16

[R2-2004674](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004674.zip) Remaining issues on L2 measurement QUALCOMM Europe Inc. - Spain discussion Rel-16

[R2-2004713](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004713.zip) Corrections to TS 37.320 Ericsson discussion

[R2-2005370](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005370.zip) Minor issues on TS 37.320 Huawei, HiSilicon discussion Rel-16 NR\_SON\_MDT-Core

[R2-2005453](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005453.zip) CR to 37.320 CMCC, Nokia, Nokia Shanghai Bell CR Rel-16 37.320 16.0.0 0085 - B NR\_SON\_MDT-Core

[R2-2005467](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005467.zip) Correction to TS 37.320 on MDT configuration ZTE Corporation, Sanechips discussion Rel-16 NR\_SON\_MDT-Core

R2-2006002 Summary of Corrections for 37.320 CMCC discussion Rel-16 NR\_SON\_MDT-Core

### 6.12.4 ASN1 review

For RRC corrections: The proponent company, for accepted RIL issues, if needed, can provide a discussion doc, with an annex TP. Minor issues are expected to be resolved in RRC email discussions without any tdoc (before or during meeting). RRC Rapporteur (Huawei and Ericsson) will classify which RIL issues needs contributions (discussion + TP) based on the outcome of the email discussions related to RIL and SON issues. For those RIL issues that the RRC rapporteur thinks that a disc+TP paper is required then the original proponent of that issue can produce the corresponding contribution.

[R2-2004409](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004409.zip) [Z162-Z166] Correction to connection establishment failure report ZTE Corporation, Sanechips discussion Rel-16 NR\_SON\_MDT-Core Late

[R2-2004410](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004410.zip) [Z167][Z169] Correction to RLF report ZTE Corporation, Sanechips discussion Rel-16 NR\_SON\_MDT-Core

[R2-2004411](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004411.zip) [Z170-171][Z173] Correction to RACH report ZTE Corporation, Sanechips discussion Rel-16 NR\_SON\_MDT-Core

[R2-2004417](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004417.zip) Corrections on Sensor Measurement CATT discussion Rel-16 38.331 NR\_SON\_MDT-Core

[R2-2004528](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004528.zip) Corrections to RA/RLF Report\_S951\_S952 Samsung Electronics Co., Ltd discussion Rel-16 NR\_SON\_MDT-Core

[R2-2004717](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004717.zip) [E008] On adding LBTFailure as SCG Failure cause and RLF cause Ericsson discussion

[R2-2004718](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004718.zip) [E009] On EUTRA previousPCellID in NR RLF report Ericsson discussion

[R2-2004719](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004719.zip) [E012] On logging TAC in CEF report Ericsson discussion

[R2-2004720](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004720.zip) [E021] Any cell selection state related logging for OOC event Ericsson discussion

[R2-2004721](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004721.zip) [E028] On SON-MDT related UE capabilities addition Ericsson discussion

[R2-2004722](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004722.zip) [E200] On T312 expiry related RLF cause Ericsson discussion

[R2-2004723](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004723.zip) [E235] UE power savings impact on MDT Ericsson, CMCC, Samsung discussion

[R2-2004733](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004733.zip) Clarification to RA-report purposes Ericsson discussion

[R2-2004884](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004884.zip) [S953] Mobility state reporting in RRC connection re-establishment Samsung Electronics Co., Ltd discussion Rel-16 NR\_SON\_MDT-Core

[R2-2004886](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004886.zip) [S954] Logged MDT configuration in UE Inactive AS Context Samsung Electronics Co., Ltd discussion Rel-16 NR\_SON\_MDT-Core

[R2-2004902](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004902.zip) Text Proposal\_for\_RIL\_S481 Samsung Electronics Co., Ltd discussion Rel-16 NR\_SON\_MDT-Core

R2-2005371 Summary of [Post109bis-e][960] ASN1 RIL discussion Huawei discussion Rel-16 NR\_SON\_MDT-Core Late

[R2-2005372](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005372.zip) [H363] Discussion on UE logging of a MDT entry Huawei, HiSilicon discussion Rel-16 NR\_SON\_MDT-Core

[R2-2005373](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005373.zip) [H365] Discussion on conditions for RLF report Huawei, HiSilicon discussion Rel-16 NR\_SON\_MDT-Core

[R2-2005374](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005374.zip) [H366] Discussion on processing delay requirements Huawei, HiSilicon discussion Rel-16 NR\_SON\_MDT-Core

[R2-2005375](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005375.zip) [H367] Discussion on failedPcellId-EUTRA Huawei, HiSilicon discussion Rel-16 NR\_SON\_MDT-Core

[R2-2005376](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005376.zip) [H368] Discussion on measResult-RLF-Report-EUTRA Huawei, HiSilicon discussion Rel-16 NR\_SON\_MDT-Core

[R2-2005377](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005377.zip) [H369][H370] Discussion on corrections of TAC Huawei, HiSilicon discussion Rel-16 NR\_SON\_MDT-Core

[R2-2005378](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005378.zip) [H371] Discussion on applying the field interFreqTargetList Huawei, HiSilicon discussion Rel-16 NR\_SON\_MDT-Core

[R2-2005416](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005416.zip) Correction on MDT Configuration [S959] Samsung discussion NR\_SON\_MDT-Core

[R2-2005468](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005468.zip) TP on cat-a proposal2/3 of SON emailDisc[961] ZTE Corporation, Sanechips discussion Rel-16 NR\_SON\_MDT-Core Late

[R2-2005469](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005469.zip) [Z168][Z172] Alignment of RA informatiom ZTE Corporation, Sanechips discussion Rel-16 NR\_SON\_MDT-Core

[R2-2006001](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006001.zip) Summary of ASN1 review Huawei discussion Rel-16 NR\_SON\_MDT-Core

=> Revised in R2-2006015

R2-2006015 Summary of ASN1 review Huawei discussion Rel-16 NR\_SON\_MDT-Core

### 6.12.5 TS 38314 corrections

Discussion tdoc should be with an annex TP. For each company, only one contribution is allowed

[R2-2004415](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004415.zip) Consideration on UL Packet Delay CATT discussion Rel-16 38.314 NR\_SON\_MDT-Core

[R2-2004714](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004714.zip) Corrections to TS 38.314 Ericsson discussion

[R2-2004789](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004789.zip) Remaining issues for Number of active UEs NTTDOCOMO, INC. discussion

[R2-2005379](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005379.zip) Minor issues on TS 38.314 Huawei, HiSilicon discussion Rel-16 NR\_SON\_MDT-Core

[R2-2005433](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005433.zip) Summary of AI 6.12.5 L2 measurements CMCC discussion Rel-16 NR\_SON\_MDT-Core Late

[R2-2005434](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005434.zip) draft TS 38.314 CMCC draft TS Rel-16 38.314 0.3.0 NR\_SON\_MDT-Core

[R2-2005470](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005470.zip) Remianing issues on L2 measurement ZTE Corporation, Sanechips discussion Rel-16 NR\_SON\_MDT-Core

### 6.12.6 UE capabilities

No contribution is allowed for this agenda for any company except rapporteur,. The discussion will be based on rapporteur’s input.

[R2-2004504](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004504.zip) Running CR to 38.306 for NR\_SON\_MDT vivo, CMCC draftCR Rel-16 38.306 16.0.0 NR\_SON\_MDT-Core

[R2-2004505](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004505.zip) Running CR to 38.306 for NR\_SON\_MDT vivo, CMCC draftCR Rel-16 38.306 16.0.0 NR\_SON\_MDT-Core

=> Revised in R2-2005722

R2-2005722 Running CR to 36.306 for NR\_SON\_MDT vivo, CMCC draftCR Rel-16 36.306 16.0.0 NR\_SON\_MDT-Core

[R2-2005435](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005435.zip) UE feature list introduction for NR SON/MDT WI CMCC CR Rel-16 38.822 15.0.1 0003 - B NR\_SON\_MDT-Core

## 6.13 2-step RACH for NR

(NR\_2step\_RACH-Core; leading WG: RAN1; REL-16; started: Dec 18; target; Mar 20; WID: RP-200085; SR: RP-200488). Documents in this agenda item will be handled in a break out session

Time budget: 1 TU

Tdoc Limitation: 1

### 6.13.1 General

Running CRs, Incoming LSs, Contributions in this AI are restricted for WI rapporteur inputs and/or spec rapporteur inputs and do not count towards the tdoc limits.

All comments related to 38.300 should be given directly to Eswar rapporteur. ZTE will update CRs according to received comments offline

[R2-2004344](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004344.zip) LS Response on NR-U PRACH root sequence for 2-step RA (R1-2002853; contact: Ericsson) RAN1 LS in Rel-16 NR\_2step\_RACH-Core, NR\_unlic-Core To:RAN2

R2-2004879 4-step RA type description Nokia (rapporteur), Nokia Shanghai Bell, ZTE CR Rel-16 38.300 16.1.0 0233 - F NR\_2step\_RACH-Core Withdrawn

[R2-2004882](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004882.zip) 4-step RA type description Nokia (rapporteur), Nokia Shanghai Bell, ZTE CR Rel-16 38.300 16.1.0 0214 1 F NR\_2step\_RACH-Core R2-2003009

### 6.13.2 User plane aspects

Including outcome [Post109bis-e][942][ 2s-RA] UP and other open issues (ZTE)

Contributions related to issues addressed by the email discussions should be avoided and are discouraged for this AI.

All identified critical open issues should be provided to the rapporteur via email discussion Post109bis-e#942 and new contributions on those topics are discouraged. Contributions should be reserved for more complicated and critical issues.

No individual company CRs should be submitted

[R2-2004418](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004418.zip) Remaining Issues on MsgA Transmission vivo discussion

[R2-2004523](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004523.zip) Issues - 2 step RA Samsung Electronics Co., Ltd discussion Rel-16 NR\_2step\_RACH-Core

R2-2004552 Remaining issues of 2-step RACH OPPO discussion Rel-16 NR\_2step\_RACH-Core Late

[R2-2004600](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004600.zip) 2-step RA and C-DRX Nokia, Nokia Shanghai Bell, ZTE (Rapporteur) discussion Rel-16 NR\_2step\_RACH-Core

[R2-2004614](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004614.zip) Email Discussion Summary: UP and other open issues ([Post109e-bis#xx][ 2s-RA]) ZTE Corporation (Email Rapporteur) report

=> Revised in [R2-2006018](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006018.zip)

[R2-2006018](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006018.zip) Email Discussion Summary: UP and other open issues ([Post109e-bis#xx][ 2s-RA]) ZTE Corporation (Email Rapporteur) report

[R2-2004617](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004617.zip) Updates to MAC spec for 2-step RACH ZTE (CR editor), Nokia, Samsung, Vivo, Ericsson, Fujitsu CR Rel-16 38.321 16.0.0 0714 2 F NR\_unlic-Core, NR\_2step\_RACH-Core R2-2003962

=> Revised in [R2-2006019](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006019.zip)

[R2-2006019](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006019.zip) Updates to MAC spec for 2-step RACH ZTE (CR editor), Nokia, Samsung, Vivo, Ericsson, Fujitsu CR Rel-16 38.321 16.0.0 0714 3 F NR\_unlic-Core, NR\_2step\_RACH-Core R2-2003962

[R2-2004973](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004973.zip) Remaining issue on 2-step random access Huawei, HiSilicon discussion Rel-16 NR\_2step\_RACH-Core

[R2-2005144](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005144.zip) msgB-RNTI ambiguity for CFRA and CBRA of 2-Step RACH Sony discussion Rel-16 NR\_2step\_RACH-Core R2-2002668

[R2-2005601](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005601.zip) Remaining issue on user plane aspects LG Electronics discussion NR\_2step\_RACH-Core

### 6.13.3 RRC stage-3 related aspects

Including outcome of [Post109bis-e][943][2s-RA] RRC and ASN.1 open issues (Ericsson). Contributions related to issues addressed by the email discussions should be avoided and are discouraged for this AI.

All identified critical open issues should be provided to the rapporteur via email discussion Post109bis-e#938 and new contributions on those topics are discouraged. Contributions should be reserved for more complicated and critical issues.

No individual company CRs should be submitted

[R2-2004988](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004988.zip) [H631][H632][H635] DraftCR on RACH-ConfigCommonTwoStepRA Huawei, HiSilicon draftCR Rel-16 38.331 16.0.0 NR\_2step\_RACH-Core Late

[R2-2004989](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004989.zip) [H636][H638] DraftCR on RACH-ConfigGenericTwoStepRA Huawei, HiSilicon draftCR Rel-16 38.331 16.0.0 NR\_2step\_RACH-Core Late

[R2-2005048](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005048.zip) Discussion on preamble-to-PRU mapping for 2-step CFRA Spreadtrum Communications discussion

[R2-2005302](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005302.zip) Email\_Discussion\_Report\_Post109bis-e\_943\_2sRA\_RRC\_Open\_Issues Ericsson report Rel-16 38.331 NR\_2step\_RACH-Core Late

[R2-2005303](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005303.zip) 38331\_Rel16\_CRxxx\_Corrections for 2-step RA Ericsson CR Rel-16 38.331 16.0.0 1664 - F NR\_2step\_RACH-Core Late

[R2-2005567](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005567.zip) Removal of total number of preamble for 2-step RACH ASUSTeK discussion Rel-16 NR\_2step\_RACH-Core

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

(SRVCC\_NR\_to\_UMTS-Core; leading WG: RAN2; REL-16; started: Dec 18; target; Mar 20; WID: RP-190713; SR: RP-200436) Documents in this agenda item will be handled in a break out session

Tdoc Limitation: 1 tdoc

The Core part of this WI is 100% Only corrections.

### 6.14.1 Organisational

Including incoming LSs, rapporteur inputs, etc.

Contributions in this AI are reserved for WI rapporteur inputs and do not count towards the tdoc limits.

### 6.14.2 Corrections

Including contributions/TPs on SRVCC-specific Class 3 ASN.1 review aspects, if any. For these, no individual company CRs should be submitted: please consult with the RRC CR rapporteur first (tangxun@huawei.com).

[R2-2005066](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005066.zip) CR on 38.331 for SRVCC from 5G to 3G Huawei, HiSilicon, Lenovo, Motorola Mobility, China Unicom CR Rel-16 38.331 16.0.0 1645 - F SRVCC\_NR\_to\_UMTS-Core

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

(NR\_CLI\_RIM; leading WG: RAN1; REL-16; started: Dec 18; target; Jun 20; WID: RP-191997; SR: RP-200453) Documents in this agenda item will be handled in a break out session.

Tdoc Limitation: 1 tdoc

### 6.15.1 Organisational

Including incoming LSs, rapporteur inputs, etc.

Contributions in this AI are reserved for WI rapporteur inputs and do not count towards the tdoc limits.

[R2-2004347](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004347.zip) LS on subcarrier spacing for CLI-RSSI measurement (R1-2002966; contact: LGE) RAN1 LS in Rel-16 NR\_CLI\_RIM-Core To:RAN2 Cc:RAN4

[R2-2004365](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004365.zip) Reply LS on CLI measurement and reporting (R4-2005297; contact: LGE) RAN4 LS in Rel-16 NR\_CLI\_RIM-Core To:RAN1 Cc:RAN2

[R2-2004430](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004430.zip) UE capabilities for CLI Qualcomm Incorporated CR Rel-16 38.306 16.0.0 0301 - F NR\_CLI\_RIM-Core

[R2-2005695](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005695.zip) CR on UE capabilities for CLI LG Electronics Inc. CR Rel-16 38.331 16.0.0 1689 - F NR\_CLI\_RIM-Core

=> Revised in R2-2006000

R2-2006000 CR on UE capabilities for CLI LG Electronics Inc. CR Rel-16 38.331 16.0.0 1689 1 F NR\_CLI\_RIM-Core

[R2-2005707](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005707.zip) CLI Corrections Nokia (Rapporteur) CR Rel-16 38.300 16.1.0 0217 2 F NR\_CLI\_RIM-Core R2-2005277 Late

[R2-2005730](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005730.zip) UE capabilities for CLI Ericsson CR Rel-16 38.331 16.0.0 1693 - F NR\_CLI\_RIM Late

Withdrawn:

R2-2005277 CLI Featurre overview - Additional changes Nokia (Rapporteur) CR Rel-16 38.300 16.1.0 0217 1 D NR\_CLI\_RIM-Core R2-2003365 Withdrawn

### 6.15.2 Remaining open issues

Including contributions/TPs on corrections and CLI-specific Class 3 ASN.1 review aspects, if any. For these, no individual company CRs should be submitted: please consult with the RRC CR rapporteur first (sangwon7.kim@lge.com).

[R2-2005309](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005309.zip) On the impact of DRX on CLI SRS-RSRP measurement Huawei, HiSilicon discussion Rel-16

[R2-2005603](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005603.zip) Potential correction on SRS resource for Xn exchange ZTE Corporation, Sanechips discussion Rel-16 NR\_CLI\_RIM-Core

## 6.16 Enhancements on MIMO for NR

(NR\_eMIMO-Core; leading WG: RAN1; REL-16; started: Jun 18; target; June 20; WID: RP-200474; SR: RP-200473). Documents in this agenda item will be handled in a break out session.

Tdoc Limitation: 2 tdocs

### 6.16.1 Organisational

Including incoming LSs, rapporteur inputs, etc.

Contributions in this AI are reserved for WI rapporteur inputs and do not count towards the tdoc limits.

[R2-2004833](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004833.zip) Miscellaneous corrections on eMIMO Samsung, Nokia, Nokia Shanghai Bell CR Rel-16 38.321 16.0.0 0711 3 F NR\_eMIMO-Core R2-2003911

### 6.16.2 RRC aspects

Including output of email discussion [Post109bis-e][933][eMIMO] RRC Open issues (Ericsson).

Including contributions/TPs on eMIMO-specific Class 3 ASN.1 review aspects (such aspects should anyway be raised in the email discussion [933]). No individual company CRs should be submitted.

Also including contributions on UE capability aspects.

[R2-2004465](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004465.zip) [Post109bis-e][933][eMIMO] RRC Open Issues (Ericsson) Ericsson report Rel-16 NR\_eMIMO-Core

### 6.16.3 Other aspects

Including contributions/TPs on MAC corrections. For these, no individual company CRs should be submitted: please consult with the MAC CR rapporteur first (seungri.jin@samsung.com).

If needed, a summary document may also be utilized to treat this agenda item.

[R2-2004463](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004463.zip) On pathloss reference RS MAC CE for SRS and PUSCH Ericsson discussion Rel-16 NR\_eMIMO-Core

[R2-2004464](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004464.zip) On SRS activation/deactivation MAC CE for the list of serving cells Ericsson discussion Rel-16 NR\_eMIMO-Core

[R2-2004524](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004524.zip) Issues - Beam Failure Recovery Samsung Electronics Co., Ltd discussion Rel-16 NR\_eMIMO-Core

[R2-2004646](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004646.zip) Discussion on the priority of the BFR MAC CE and SR vivo, Samsung discussion Rel-16 NR\_eMIMO-Core

[R2-2004647](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004647.zip) RACH cancellation after the transmission of Msg3 or MsgA vivo discussion Rel-16 NR\_eMIMO-Core

[R2-2004832](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004832.zip) Remaining issues on the MAC CEs for beam enhancements Samsung discussion Rel-16 NR\_eMIMO-Core

[R2-2004897](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004897.zip) Open issues for PUSCH Pathloss Reference RS Update MAC CE OPPO discussion Rel-16 NR\_eMIMO-Core

[R2-2004898](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004898.zip) Open issues on Spcell BFR OPPO discussion Rel-16 NR\_eMIMO-Core

[R2-2005122](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005122.zip) The Remaining issue on stopping the sr-ProhibitTimer ZTE, Sanechips discussion Rel-16 NR\_eMIMO-Core

[R2-2005123](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005123.zip) Discussion on Beam Failure Recovery for SCell ZTE , Sanechips, Nokia, Nokia Shanghai Bell, Huawei, HiSilicon, OPPO, Sharp, Lenovo, Apple, Asia Pacific Telecom, Futurewei discussion Rel-16 NR\_eMIMO-Core

[R2-2005185](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005185.zip) Remaining issues on DL MIMO MAC CE Qualcomm Incorporated discussion Rel-16 NR\_eMIMO-Core

[R2-2005366](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005366.zip) Consideration on timer based BFR MAC CE transmission LG Electronics Inc. discussion NR\_eMIMO-Core

[R2-2005493](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005493.zip) Discussion on timer based BFR MAC CE transmission Qualcomm Incorporated, vivo, Ericsson, Samsung, MediaTek, CATT discussion Rel-16 NR\_eMIMO-Core

[R2-2005568](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005568.zip) Clarification on generation of BFR MAC CE ASUSTeK discussion Rel-16 38.321 NR\_eMIMO-Core

[R2-2005689](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005689.zip) PCI List for CAG QUALCOMM Europe Inc. - Italy discussion

Withdrawn:

[R2-2005257](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005257.zip) Remaining issues on SCell BFR Huawei, HiSilicon discussion Rel-16 NR\_eMIMO-Core Withdrawn

## 6.18 Private Network Support for NG-RAN

(NG\_RAN\_PRN-Core; leading WG: RAN3; REL-16; started: Mar 19; target; June 20; WID: RP-200122 SR; RP-200441) Documents in this agenda item will be handled in a break out session.

Tdoc Limitation: 2 tdocs

[R2-2004508](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004508.zip) Miscellaneous corrections to NPN Nokia (Rapporteur) CR Rel-16 38.300 16.1.0 0225 - F NG\_RAN\_PRN-Core

### 6.18.1 Organisational

Including incoming LSs, rapporteur inputs, etc.

Contributions in this AI are reserved for WI rapporteur inputs and do not count towards the tdoc limits.

R2-2004484 Finalization of the support of Non-Public Networks Nokia (Rapporteur) CR Rel-16 38.331 16.0.0 1513 1 F NG\_RAN\_PRN-Core R2-2002658 Late

[R2-2005739](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005739.zip) Reply LS on CMAS/ETWS and emergency services for SNPNs (S1-202220; contact: Nokia) SA1 LS in Rel-16 NG\_RAN\_PRN To:RAN2, SA2 Cc:CT1

[R2-2005991](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005991.zip) Reply LS on Manual CAG ID selection and granularity of UAC parameters for PNI-NPNs (S1-202265; contact: CMCC) SA1 LS in Rel-16 NG\_RAN\_PRN-Core To:RAN2 Cc: CT1, SA2, RAN3

[R2-2005993](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005993.zip) Reply LS on manual CAG selection (S1-202277; contact: Qualcomm) SA1 LS in Rel-16 Vertical\_LAN, NG\_RAN\_PRN-Core To:RAN2, CT1 Cc: SA2, RAN3

### 6.18.2 RRC aspects

Including output of email discussion [Post109bis-e][934][PRN] Remaining open issues (Nokia). Contributions related to issues addressed by this email discussions should be avoided and are discouraged for this AI.

Including contributions/TPs on PRN-specific Class 3 ASN.1 review aspects (such aspects should anyway be raised in the email discussion [934]). No individual company CRs should be submitted.

Also including contributions on UE capability aspects.

[R2-2004481](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004481.zip) Report from email discussion [Post109bis-e][934][PRN] Remaining open issues Nokia (Rapporteur) discussion Rel-16 NG\_RAN\_PRN-Core

[R2-2004482](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004482.zip) Selected NPN issue (ASN.1 Z102) Nokia, Nokia Shanghai Bell discussion Rel-16 NG\_RAN\_PRN-Core

[R2-2004483](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004483.zip) Discussion on NPN indexing Nokia, Nokia Shanghai Bell discussion Rel-16 NG\_RAN\_PRN-Core

[R2-2004521](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004521.zip) Consideration on Cells in PCI Range for CAG CATT discussion Rel-16 38.331 NG\_RAN\_PRN-Core

[R2-2004571](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004571.zip) draft CR on introdcution of UE capability for non-public network ZTE Corporation, Sanechips draftCR Rel-16 38.306 16.0.0 B NG\_RAN\_PRN-Core

[R2-2004743](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004743.zip) Discussion on ANR for NPN vivo discussion

[R2-2005451](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005451.zip) Early Implementation of CAG Features CMCC, China Telecom, CATT, ZTE, Huawei, Sony discussion Rel-16 NG\_RAN\_PRN-Core

[R2-2005452](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005452.zip) CR for Early Implementation of CAG Features CMCC, China Telecom, CATT, ZTE, Huawei, Sony CR Rel-16 38.331 16.0.0 1674 - B NG\_RAN\_PRN-Core

[R2-2005592](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005592.zip) Discussion on network indexing Huawei, HiSilicon discussion Rel-16 NG\_RAN\_PRN-Core

[R2-2005593](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005593.zip) Discussion on remaining issues on NPN Huawei, HiSilicon discussion Rel-16 NG\_RAN\_PRN-Core

[R2-2005658](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005658.zip) Need code of hrnn-List in SIB10 LG Electronics France discussion

[R2-2005659](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005659.zip) Prioritization of CAG for mobility LG Electronics France discussion NG\_RAN\_PRN-Core

### 6.18.3 Other aspects

Including non-RRC issues not addressed in email discussion [934].

Including contributions/TPs on TS 38.304 corrections. For these, no individual company CRs should be submitted: please consult with the 38.304 CR rapporteur first (rprakash@qti.qualcomm.com).

If needed, a summary document may also be utilized to treat this agenda item.

[R2-2004522](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004522.zip) Remaining Issues related to 38.304 CATT discussion Rel-16 38.304 NG\_RAN\_PRN-Core

[R2-2004572](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004572.zip) Remaining issues for NPN ZTE Corporation, Sanechips discussion Rel-16 NG\_RAN\_PRN-Core

[R2-2004603](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004603.zip) Remaining open issues in the specification of NPN Lenovo, Motorola Mobility discussion Rel-16 NG\_RAN\_PRN-Core

[R2-2004689](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004689.zip) Purpose and consequences of manual CAG selection Ericsson discussion Rel-16 NG\_RAN\_PRN-Core

[R2-2004690](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004690.zip) Remaining aspects of NPN Ericsson discussion Rel-16 NG\_RAN\_PRN-Core

[R2-2004728](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004728.zip) Remaining issues for Manual CAG selection Intel Corporation discussion Rel-16 NG\_RAN\_PRN-Core

[R2-2004744](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004744.zip) Discussion on manual CAG selection vivo discussion

[R2-2005148](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005148.zip) UE behavior for CAG PCI range Sony discussion Rel-16 NG\_RAN\_PRN-Core

[R2-2005364](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005364.zip) Clarification of cell reselection for NPN-capable U China Telecom discussion Rel-16

[R2-2005365](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005365.zip) Further consideration of UAC in PRN China Telecom discussion Rel-16

[R2-2005674](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005674.zip) PRN 38304 rapporteur summary of open issues QUALCOMM Europe Inc. - Italy discussion Rel-16

[R2-2005676](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005676.zip) PRN 38304 CR (rapporteur update) QUALCOMM Europe Inc. - Italy CR Rel-16 38.304 16.0.0 0156 2 F NG\_RAN\_PRN R2-2003908

[R2-2005680](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005680.zip) Emergency Calls in CAG Cells for UE supporting NPN-ANR QUALCOMM Europe Inc. - Italy discussion

## 6.19 Other NR Rel-16 WIs/Sis

This agenda item is to be used for LSs and documents relating to Rel-16 NR but for which there is no existing RAN WI/SI (e.g. LSs from CT/SA requesting RAN2 action) or for which there is no allocated RAN2 time (e.g. some RAN4 led WIs with no RAN2 time but might require introduction of UE capability signalling).

Time budget: 0.5 TU

* [AT110-e][025][TEI16 Other] In-principle Agreed CRs (Mediatek)

Scope: Treat all documents under 6.19.0, and 6.20.1.0 (proponents are responsible to explain and drive)

Expected Outcome: Agree In-principle agreed CRs, Deadline: June 5, 0700 UTC.

[R2-2006109](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006109.zip) Report of [AT110e][025][TEI16 Other] In-principle Agreed CRs (Mediatek) MediaTek discussion Rel-16 TEI16

* [025] Noted, see below

### 6.19.0 In-principle Agreed CRs

Misc

[R2-2004583](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004583.zip) UE capability for single entry PHR with P bit OPPO, Ericsson, MediaTek Inc., Nokia, Nokia Shanghai Bell, vivo, ZTE, Xiaomi CR Rel-16 38.331 16.0.0 1589 1 F TEI16 R2-2004214

* [025] Endorsed, to be merged UE cap

[R2-2004584](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004584.zip) UE capability for single entry PHR with P bit OPPO, Ericsson, MediaTek Inc., Nokia, Nokia Shanghai Bell, vivo, ZTE, Xiaomi CR Rel-16 38.306 16.0.0 0296 1 F TEI16 R2-2004215

* [025] Endorsed, to be merged UE cap

[R2-2004883](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004883.zip) P bit for Single Entry PHR Nokia, Nokia Shanghai Bell, Apple, Ericsson, Lenovo, MediaTek Inc., NTT DOCOMO, INC., OPPO CR Rel-16 38.321 16.0.0 0716 1 F TEI16 R2-2003010

* [025] Agreed

eCall

Note that the contents for the CRs was agreed last meeting, however only Draft CRs were provided last meeting.

[R2-2004318](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004318.zip) Reply LS on support for eCall over NR (S2-2003308; contact: Qualcomm) SA2 LS in Rel-16 EIEI, 5GS\_Ph1 To:SA, RAN2, CT1, CT Cc:SA1, SA4, TSG RAN, SA5, RAN5

Expect to be Noted

* [025] Noted

[R2-2005388](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005388.zip) Introduction of eCall over IMS for NR Huawei, HiSilicon CR Rel-16 38.300 16.1.0 0239 - C TEI16

[R2-2005389](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005389.zip) Introduction of eCall over IMS for NR Huawei, HiSilicon CR Rel-16 38.304 16.0.0 0173 - C TEI16

[R2-2005390](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005390.zip) Introduction of eCall over IMS for NR Huawei, HiSilicon CR Rel-16 38.331 16.0.0 1670 - C TEI16

[R2-2005391](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005391.zip) Corrections on Emergency Services Huawei, HiSilicon CR Rel-15 38.300 15.9.0 0240 - F TEI15

* [025] All 4 agreed

Withdrawn:

R2-2004391 UE capability for single entry PHR with P bit OPPO, Ericsson, MediaTek Inc., Nokia, Nokia Shanghai Bell, vivo, ZTE, Xiaomi CR Rel-16 38.331 16.0.0 1593 - F TEI16

R2-2004392 UE capability for single entry PHR with P bit OPPO, Ericsson, MediaTek Inc., Nokia, Nokia Shanghai Bell, vivo, ZTE, Xiaomi CR Rel-16 38.306 16.0.0 0297 - F TEI16

R2-2004880 P bit for Single Entry PHR Nokia, Nokia Shanghai Bell, Apple, Ericsson, Lenovo, MediaTek Inc., NTT DOCOMO, INC., OPPO CR Rel-16 38.321 16.0.0 0747 - F TEI16

### 6.19.1 Other

Including outcome of email discussion [Post109bis-e][045][R16 Other] UL TX Switching-NR\_FR1 (China Telecom)

New Incoming LS

[R2-2006124](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006124.zip) LS on Frequency separation class for DL-only spectrum for FR2 (R4-2008484; contact: Apple) Rel-16 NR\_RF\_FR2\_req\_enh RAN2

* Noted

[R2-2006137](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006137.zip) LS on CSI-RS based intra-frequency and inter-frequency measurement definition (R4-2009260; contact: CATT) Rel-16 NR\_CSIRS\_L3meas RAN2 RAN1

- CATT has problems presenting

- ZTE think this may impact Stage-2

* Noted

[R2-2006139](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006139.zip) Reply LS on CGI reading with autonomous gaps (R4-2009268; contact: ZTE) Rel-16 NR\_RRM\_Enh\_Core RAN2

* Ask NR RRC rapporteur to capture this in Rapporteur R16 CR
* Noted

R2-2006240 LS on AT Commands for Bit Rate Recommendation (S4-200880; contact: Qualcomm) SA4 LS in Rel-16 5GMS3 To:CT1 Cc:SA2, RAN2

* Noted

R2-2006201 Introduction on frequency separation class for DL-only FR2 spectrum Apple CR Rel-16 38.331 16.0.0 1705 F TEI16

R2-2006202 Introduction on frequency separation class for DL-only FR2 spectrum Apple CR Rel-16 38.306 16.0.0 0358 F TEI16

* [Post110-e][][Other] frequency separation class for DL-only FR2 spectrum (Apple)

Scope: incoming LS in R2-2006124, CRs proposed in R2-2006201 and R2-2006202. Review and modify if needed the CRs, expect that it is possible to approve in a week.

Intended outcome: Agreed CRs 38331 38306

Deadline: Short

UL TX Switching

Treat by email. If needed on-line.

* [AT110-e][026][Other] UL Tx switching (China Telecom)

Scope: Treat R2-2004375, R2-2004328, R2-2005219, R2-2004756, R2-2005220, R2-2005222 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes. Deadline: June 4, 0700 UTC. (Remaining parts if needed can be revisited on-line).

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

[026] DISCUSSION and Desicions

* [026] introduce a new band combination list, under which the UE capabilities associated with UL Tx switching are reported.
* [026] reporting capability on each UL band pairs per BC that supports UL Tx switching.

[026] AT EOM

- Rap: The plan is to have CRs for RP and address further open points in Q3.

* [Post110-e][026][Other] UL Tx switching (China Telecom)

Scope: Continue discussion. Agreeable CRs, intended for RP

Intended Outcome: Agreed CRs 38331 38306

Deadline: Short

[R2-2006112](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006112.zip) Report of [AT110e][026][Other] UL Tx switching (China Telecom) China Telecom

- CT explains that P4 was updated

- Intel may have missed this. Intel think that the UE only reports this if the network requests it. Can we confirm whether this is the case.

- Huawei think indeed this works like SRS carrier switching in R15 wrt filtering.

- Intel wonder if this is linked at all to SRS carrier switching. Huawei confirms that this is separate to SRS carrier switching.

P3

- Docomo think that P3 covers a R4 item that is still FFS. CT think there is a Note to align this with previous agreement. CT think that the FFS is only for the components for whch there is the note, this is not a FFS for R2. Docomo think we agreed yesterday that we only accept M/O-FFSes, any other FFS we would postpone. Huawei wonder if this is 7/2. Docomo agrees. Huawei think R4 might have forgotten to remove the brackets (mistake). OPPO agree with the rapporteur.

- Apple think that it is clear how to capture DL interruption anyway. ZTE think DL interruption can be kept, and can check with R4 colleges.

- Ericsson wonder if we think this is an FFS whether this FG would be excluded or not. Also for 7/5 there is no description so far. Huawei think that we already agrees that we capture the feature group level, and if threre is an FFS it would be excluded.

- Intel think that if we don’t have this then a UE would need to support without interruption, could be ok to have this particular cap. CATT support to keep this.

4a

- Oppo think that the different options for EN-DC need to be captured also in the CR.

- ZTE think this is correct. CATT support as well

* Introduce a capability reporting DL interruption, which is defined as per band per band combination for each band pair supporting UL Tx switching (if more info from R4 people can be provided, this can be rediscussed)
* introduce a per BC capability which reports the supported option in inter-band UL CA case and EN-DC case where UE supports UL Tx switching. For inter-band UL CA case, the candidate values set is {option1, option2, both option 1 and option 2}. For EN-DC case, the candidate values set is {option1, option2}.

[R2-2004375](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004375.zip) LS on UE capability on DL interruption for UL Tx switching (R4-2005665; contact: Apple) RAN4 LS in Rel-16 NR\_RF\_FR1 To:RAN2 Cc:RAN1

* [026] Noted

[R2-2004328](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004328.zip) Reply LS on UE Tx switching period delay and DL interruption (R1-2002960; contact: Apple) RAN1 LS in Rel-16 NR\_RF\_FR1 To:RAN4 Cc:RAN2

* [026] Noted

[R2-2005219](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005219.zip) Report of [Post109bis-e][045][R16 Other] UL TX Switching-NR\_FR1 (China Telecom) China Telecommunications discussion

* [026] Noted

[R2-2004756](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004756.zip) Remaining issues on UL switching Apple, China Telecom discussion Rel-16 NR\_newRAT-Core

DISCUSSION

General

- BT wonder about the switching time granularity, what is planned to be indicated. Apple think R4 already defined these capabilities and are captured in the CR.

P1

- CT think the intention of current CRs is Alt 1-3. MTK agrees and we have the new BC list for this, otherwise the UE report in the old BC list. Huawei agrees that this list is TX switching specific and the intention is to use in TDM manner. QC can support 1-3 and think which option doesn’t make so much difference. Ericsson think 1-3 can work. CATt support 1-3.

- Oppo think maybe 1-2 should be the assumption. Oppo would like more time to understand the differences. Apple think that if case 1 UE cap is indicated by legacy list then 1-3 makes sense if that is not the case then we might need to consider 1-2

- ZTE understands that legacy BC list can be used to indicate cap for case 1.

- QC wonder if the intention is to indicate specifically which carrier is Carrier 1 and Carrier 2. Apple think that if UE indicate 1TX on one carrier and 2TX for another carrier, C1 is the 1TX one. CT wonder if we need to make this clear in Cap reporting. Apple think the no of TX can be used as implicit indication, but explicit may be better and more future proof. Huawei think this should not be explicit, we anyway need to identify feature set to understand the options.

- Observation: there is an carrier index in the signalling, but this is not intended to indicate carrier 1 carrier 2.

- Oppo wonder what if 1TX is used on carrier 2, shall we use cap from old list or new list.

- QC wonder if R4 has thought about the carrier 1 carrier 2 UE cap.

- Chair: Carrier 1 carrier 2 indication in UE cap, implicit, explicit etc can be discussed by email.

- Oppo think that if we make the assumption (assuming UE cap in existing list is applicable to case 1) 1-1 could make sense. Do not understand how to know carrier 1 and 2 for 1TX case, is the capability of legacy list applied for carrier 2 (when 1TX is used)? Ericsson and MTK think that this is reported in the new list.

- Huawei don’t want to have to combine different BC lists to understand the UE capability.

- Chair: Need to understand how 1TX+1TX will work as well, can be progressed offline.

P2

- Huawei are not sure about the problem.

- Apple think that there are several cases and one single configuration cannot work.

- Oppo agrees this may be discussed, and think e.g. for SRS example the network could avoid inconsistency problems.

- Chair: can discuss concrete cases by email

P4

- Ericsson thinl this is the case in the TS today

* In the new BC list, the UE reports a mixed UE capability which exceeds its total Tx number, e.g., 1Tx on carrier 1 and 2 Tx on carrier 2 and relies on NW side to figure out 1Tx+2Tx can only be used in a TDM manner.
* Do not consider the lower order band combination from the parent band combination with UL Tx switching as fallback band combination.
* Confirm that for a parent band combination without UL Tx switching, UE is allowed to report a lower order band combination with UL switching.

[R2-2005220](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005220.zip) 38331CR for UE capability and RRC configuration of supporting UL Tx switching China Telecommunications CR Rel-16 38.331 16.0.0 1659 - B NR\_RF\_FR1

=> Revised in R2-2006113

[R2-2006113](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006113.zip) 38331CR for UE capability and RRC configuration of supporting UL Tx switching China Telecommunications CR Rel-16 38.331 16.0.0 1659 1 B NR\_RF\_FR1

[R2-2005222](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005222.zip) 38306CR for UE capability of supporting UL Tx switching China Telecommunications CR Rel-16 38.306 16.0.0 0328 - B NR\_RF\_FR1

=> Revised in R2-2006114

R2-2006114 38306CR for UE capability of supporting UL Tx switching China Telecommunications CR Rel-16 38.306 16.0.0 0328 1 B NR\_RF\_FR1

Mandatory Gap Patterns

New LS

[R2-2006140](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006140.zip) LS on mandatory of measurement gap patterns (R4-2009269; contact: ZTE) Rel-16 NR\_RRM\_Enh\_Core RAN2

* [027] Noted

Treat by email

* [AT110-e][027][Other] Mandatory Gap Patterns (ZTE)

Scope: Treat R2-2004378, R2-2004474, R2-2004475, R2-2004476, R2-2004477, R2-2005425, R2-2005426, R2-2005427, R2-2005428 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes. Deadline: June 4, 0700 UTC. (Remaining parts if needed can be revisited on-line).

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

[027] DISCUSSION and Decisions

- [027] RAP: Regarding mandatory FR2 gap patterns (among #12~23), continue the discussion after CRs are updated based on next RAN4’s LS.

* [027] Regarding UE capability of mandatory gap pattern (among #2~#11), agree the following design of UE capability signaling:

**For NR SA and NR-DC**

**- Introduce a bitmap in NR RRC to indicate the supported gap patterns #2~#11 for NR only measurement, each bit corresponds to one gap pattern, and the mandatory gap pattern positions shall be set to 1.**

**For NE-DC**

**- Introduce 1 bit indication in NR RRC to indicate whether the UE supports all mandatory gap patterns for NR only measurement.**

**For LTE SA**

**- Introduce 1 bit indication in LTE RRC to indicate whether the UE supports all mandatory gap patterns for NR only measurement.**

**For (NG)EN-DC**

**- Introduce 1 bit indication in LTE RRC to indicate whether the UE supports all mandatory gap patterns for NR only measurement.**

[R2-2004378](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004378.zip) LS on mandatory of measurement gap patterns (R4-2005846; contact: ZTE) RAN4 LS in Rel-16 NR\_RRM\_enh-Core To:RAN2

* [027] Noted

[R2-2004474](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004474.zip) CR to 38.306 on on introduction of mandatory gap patterns in Rel-16 ZTE Corporation, Sanechips, Ericsson, MediaTek Inc., OPPO, CATT, Intel Corporation, Nokia, Nokia Shanghai Bell, Qualcomm Incorporated, Vivo CR Rel-16 38.306 16.0.0 0307 - B NR\_RRM\_enh-Core

=> Revised in R2-2006289

[R2-2006289](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006289.zip) CR to 38.306 on on introduction of mandatory gap patterns in Rel-16 ZTE Corporation, Sanechips, Ericsson, MediaTek Inc., OPPO, CATT, Intel Corporation, Nokia, Nokia Shanghai Bell, Qualcomm Incorporated, Vivo, Huawei, HiSilicon CR Rel-16 38.306 16.0.0 0307 1 B NR\_RRM\_enh-Core

* [027] Endorsed, to be merged with UE Cap

[R2-2004475](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004475.zip) CR to 38.331 on on introduction of mandatory gap patterns in Rel-16 ZTE Corporation, Sanechips, Ericsson, MediaTek Inc., OPPO, CATT, Intel Corporation, Nokia, Nokia Shanghai Bell, Qualcomm Incorporated, Vivo CR Rel-16 38.331 16.0.0 1604 - B NR\_RRM\_enh-Core

=> Revised in R2-2006290

[R2-2006290](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006290.zip) CR to 38.331 on on introduction of mandatory gap patterns in Rel-16 ZTE Corporation, Sanechips, Ericsson, MediaTek Inc., OPPO, CATT, Intel Corporation, Nokia, Nokia Shanghai Bell, Qualcomm Incorporated, Vivo, Huawei, HiSilicon CR Rel-16 38.331 16.0.0 1604 1 B NR\_RRM\_enh-Core

* [027] Endorsed, to be merged with UE Cap

[R2-2004476](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004476.zip) CR to 36.306 on on introduction of mandatory gap patterns in Rel-16 ZTE Corporation, Sanechips, Ericsson, MediaTek Inc., OPPO, CATT, Intel Corporation, Nokia, Nokia Shanghai Bell, Qualcomm Incorporated, Vivo CR Rel-16 36.306 16.0.0 1759 - B NR\_RRM\_enh-Core

=> Revised in R2-2006291

R2-2006291 CR to 36.306 on on introduction of mandatory gap patterns in Rel-16 ZTE Corporation, Sanechips, Ericsson, MediaTek Inc., OPPO, CATT, Intel Corporation, Nokia, Nokia Shanghai Bell, Qualcomm Incorporated, Vivo, Huawei, HiSilicon CR Rel-16 36.306 16.0.0 1759 1 B NR\_RRM\_enh-Core

* [027] Agreed

[R2-2004477](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004477.zip) CR to 36.331 on on introduction of mandatory gap patterns in Rel-16 ZTE Corporation, Sanechips, Ericsson, MediaTek Inc., OPPO, CATT, Intel Corporation, Nokia, Nokia Shanghai Bell, Qualcomm Incorporated, Vivo CR Rel-16 36.331 16.0.0 4294 - B NR\_RRM\_enh-Core

=> Revised in R2-2006292

R2-2006292 CR to 36.331 on on introduction of mandatory gap patterns in Rel-16 ZTE Corporation, Sanechips, Ericsson, MediaTek Inc., OPPO, CATT, Intel Corporation, Nokia, Nokia Shanghai Bell, Qualcomm Incorporated, Vivo, Huawei, HiSilicon CR Rel-16 36.331 16.0.0 4294 1 B NR\_RRM\_enh-Core

* [027] Agreed

Not Treated

4 tdocs Moved from 6.20.3.1:

[R2-2005425](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005425.zip) CR to 38.306 on mandatory gap patterns Huawei, HiSilicon CR Rel-16 38.306 16.0.0 0336 - C NR\_RRM\_enh-Core, TEI16

[R2-2005426](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005426.zip) CR to 38.331 on mandatory gap patterns Huawei, HiSilicon CR Rel-16 38.331 16.0.0 1672 - C NR\_RRM\_enh-Core, TEI16

[R2-2005427](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005427.zip) CR to 36.306 on mandatory gap patterns Huawei, HiSilicon CR Rel-16 36.306 16.0.0 1766 - C NR\_RRM\_enh-Core, TEI16

[R2-2005428](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005428.zip) CR to 36.331 on mandatory gap patterns Huawei, HiSilicon CR Rel-16 36.331 16.0.0 4325 - C NR\_RRM\_enh-Core, TEI16

**Inter-Freq measurmeents without Gaps**

Treat by email

* [AT110-e][028][Other] Inter-Freq measurmeents without Gaps (Huawei)

Scope: Treat R2-2004367, R2-2005445, R2-2005446, R2-2005447, R2-2004477 (R2-2006017), R2-2004824, R2-2004825, R2-2004757, R2-2004726, R2-2005424 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes. Deadline: June 4, 0700 UTC. (Remaining parts if needed can be revisited on-line).

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

[R2-2006121](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006121.zip) LS on inter-frequency measurement requirement without MG (R4-2007745; contact: Huawei) Rel-16 NR\_RRM\_enh-Core RAN2, RAN1

* [028] Noted

[R2-2006307](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006307.zip) Summary for [028][Other] Inter-Freq measurements without Gaps (phase 1) Huawei discussion Rel-16 NR\_RRM\_enh-Core

* [028] Noted

DISCUSSION and Decisions

* [028] Introduce a new UE capability to indicate whether the UE supports concurrent inter-frequency measurement without measurement gap and PDCCH or PDSCH reception from the serving cell with a different numerology as defined in clause 8 and 9 of TS 38.133 (Option B is selected).
* [028] Add an R16 flag to enable/disable inter-frequency measurement without MG in *MeasConfig* and an optional UE capability for inter-frequency measurement without MG.
* [028] Continue the discussion on details of 38.331 and 38.306 CRs. Provide separate 38.331 CRs for capability and function.
* [028] Include the new inter-frequency measurement without GP capability and the new simultaneousRxDataSSB-DiffNumerology in UE-NR-Capability. Wait for RAN4 feature list to decide whether the new capabilities should differentiated between FR1/FR2.
* [028] Send a reply LS to RAN4 on RAN2 progress of inter-frequency measurement without MG. The content needs further discussion.
* [028] Do not send an LS to RAN4 on the indication of *simultaneousRxDataSSB-DiffNumerology* in cases of intra and inter-frequency gapless measurement when the SSB is outside of active BWP.

[R2-2004367](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004367.zip) LS on inter-frequency measurement requirement without MG (R4-2005350; contact: Huawei) RAN4 LS in Rel-16 NR\_RRM\_enh-Core To:RAN2, RAN1

* [028] Noted

[R2-2005445](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005445.zip) Introduction of inter-frequency measurement without gap CMCC, Huawei, HiSilicon CR Rel-16 38.331 16.0.0 1673 - B NR\_RRM\_enh

=> Revised in R2-2006261

R2-2006261 Introduction of inter-frequency measurement without gap CMCC, Huawei, HiSilicon CR Rel-16 38.331 16.0.0 1673 1 B NR\_RRM\_enh

* [028] Agreed

[R2-2005446](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005446.zip) Introduction of inter-frequency measurement without gap CMCC, Huawei, HiSilicon CR Rel-16 38.306 16.0.0 0337 - B NR\_RRM\_enh

=> Revised in R2-2006262

R2-2006262 Introduction of inter-frequency measurement without gap CMCC, Huawei, HiSilicon CR Rel-16 38.306 16.0.0 0337 1 B NR\_RRM\_enh

* [028] Endorsed, to be merged UE cap

[R2-2006263](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006263.zip) Introduction of UE capabilities for inter-frequency measurement without gap CMCC, Huawei, HiSilicon CR Rel-16 38.331 16.0.0 1708 - B NR\_RRM\_Enh\_Core

* [028] Endorsed, to be merged UE cap

[R2-2006264](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006264.zip) Reply LS on inter-frequency measurement without gap RAN2 LS out Rel-16 NR\_RRM\_enh-Core, TEI16 To:RAN4 Cc:RAN1

* [028] Approved (this is the final version)

[R2-2005447](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005447.zip) Introduction of inter-frequency measurement without gap CMCC, Huawei, HiSilicon CR Rel-16 38.300 16.1.0 0241 - B NR\_RRM\_enh

=> Revised in R2-2006017

R2-2006017 Introduction of inter-frequency measurement without gap CMCC, Huawei, HiSilicon CR Rel-16 38.300 16.1.0 0241 1 B NR\_RRM\_enh

* [028] Postponed

Moved from 6.20.1.1

[R2-2004757](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004757.zip) Discussion on gapless measurement Apple discussion Rel-16 NR\_newRAT-Core

* [028] Noted

Moved from 6.20.3.1

[R2-2004726](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004726.zip) Discussion on gapless feature for inter-frequency measurement Intel Corporation discussion Rel-16 TEI16, NR\_RRM\_enh-Core

* [028] Noted, Proposal Not Pursued

Not Treated

[R2-2004824](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004824.zip) Introduction of NR inter-frequency measurement without MG MediaTek Inc. CR Rel-16 38.331 16.0.0 1627 - B NR\_RRM\_enh-Core

[R2-2004825](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004825.zip) Introduction of NR inter-frequency measurement without MG MediaTek Inc. CR Rel-16 38.306 16.0.0 0316 - B NR\_RRM\_enh-Core

Move from 6.20.3.1

[R2-2005424](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005424.zip) Draft reply LS on inter-frequency measurement without gap Huawei, HiSilicon LS out Rel-16 NR\_RRM\_enh-Core, TEI16 To:RAN4 Cc:RAN1

**HST**

Treated by email

* [AT110-e][029][Other] HST (CMCC)

Scope: Treat R2-2004368, R2-2004372, R2-2005440, R2-2005441, R2-2005442, R2-2005443, R2-2005444, R2-2005712, R2-2005449 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes. Deadline: June 4, 0700 UTC. (Remaining parts if needed can be revisited on-line).

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

R2-2006187 Summary of email discussion on R16 NR HST enhancement CMCC discussion

[R2-2006120](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006120.zip) LS on supporting Rel-16 NR HST RRM enhanced requirements from Rel-15 UEs (R4-2006965; contact: CMCC) Rel-16 NR\_HST RAN4 RAN2

* [029] Noted

[R2-2004368](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004368.zip) LS on the UE capability and network assistance signalling on inter-RAT measurement for Rel-16 NR HST RRM (R4-2005359; contact: CMCC) RAN4 LS in Rel-16 NR\_HST To:RAN2

Expected to be Noted and taken into account

* [029] Noted

[R2-2004372](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004372.zip) LS on supporting Rel-16 NR HST from Rel-15 UEs (R4-2005533; contact: CMCC) RAN4 LS in Rel-16 NR\_HST To:RAN2

Reply is expected

* [029] Noted

[R2-2005444](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005444.zip) Discussion on signalling for R16 NR HST enhancement CMCC discussion NR\_HST

38.331

* [029] Noted

[R2-2005441](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005441.zip) Introduction of signalling for high-speed train scenarios CMCC, Huawei, HiSilicon, CATT, Ericsson CR Rel-16 38.306 16.0.0 0242 4 B NR\_HST R2-2004182

=> Revised in R2-2006189

[R2-2006189](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006189.zip) Introduction of signalling for high-speed train scenarios CMCC, Huawei, HiSilicon, CATT, Ericsson CR Rel-16 38.306 16.0.0 0242 5 B NR\_HST

* [029] Endorsed, to be merged UE caps

[R2-2006327](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006327.zip) Introduction of UE capability for high-speed train scenarios CMCC, Huawei, HiSilicon, CATT, Ericsson CR Rel-16 38.331 16.0.0 1710 - B NR\_HST

* [029] Endorsed, to be merged UE caps

[R2-2005440](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005440.zip) Introduction of signalling for high-speed train scenarios CMCC, Huawei, HiSilicon, CATT, Ericsson CR Rel-16 38.331 16.0.0 1464 4 B NR\_HST R2-2004181

=> Revised in R2-2006188

[R2-2006188](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006188.zip) Introduction of signalling for high-speed train scenarios CMCC, Huawei, HiSilicon, CATT, Ericsson CR Rel-16 38.331 16.0.0 1464 5 B NR\_HST

* [029] Agreed

[R2-2005443](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005443.zip) Introduction of signalling for high-speed train scenarios CMCC, Huawei, HiSilicon, CATT, Ericsson CR Rel-16 36.306 16.0.0 1767 - B NR\_HST

=> Revised in R2-2006191

[R2-2006191](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006191.zip) Introduction of signalling for high-speed train scenarios CMCC, Huawei, HiSilicon, CATT, Ericsson CR Rel-16 36.306 16.0.0 1767 1 B NR\_HST

* [029] Agreed

[R2-2005442](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005442.zip) Introduction of signalling for high-speed train scenarios CMCC, Huawei, HiSilicon, CATT, Ericsson CR Rel-16 36.331 16.0.0 4326 - B NR\_HST Revised

[R2-2005712](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005712.zip) Introduction of signalling for high-speed train scenarios CMCC, Huawei, HiSilicon, CATT, Ericsson CR Rel-16 36.331 16.0.0 4326 1 B NR\_HST [R2-2005442](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005442.zip) Late

=> Revised in R2-2006190

[R2-2006190](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006190.zip) Introduction of signalling for high-speed train scenarios CMCC, Huawei, HiSilicon, CATT, Ericsson CR Rel-16 36.331 16.0.0 4326 2 B NR\_HST

* [029] Agreed

[R2-2005449](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005449.zip) Reply LS on supporting Rel-16 NR HST from Rel-15 Ues CMCC LS out Rel-16 NR\_HST To:RAN4

=> Revised in R2-2006192

[R2-2006192](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006192.zip) Reply LS on supporting Rel-16 NR HST from Rel-15 UEs RAN2 LS out Rel-16 NR\_HST To:RAN4

* [029] Approved (this is the final version)

**FR2 Max Permissible Exposure MPE**

Treat by email, if needed also on-line

* [AT110-e][030][Other] FR2 MPE (Interdigital)

Scope: Treat discussion papers R2-2004341, R2-2004906, R2-2004932, R2-2005126, R2-2005138, R2-2004386, R2-2004650, R2-2004778 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes. If needed after a first round of email discussion, can be revisited on-line. Rapporteur can set additional check-points.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: EOM

[R2-2006300](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006300.zip) [AT110e][030][Other] FR2 MPE (interdigital) InterDigital discussion

* [030] R2 understanding of R4 agreement: UE triggers MPE reporting if at least one cell of the MAC entity with a P-MPR ≥ a configurable threshold (per cell).
* [030] R2 understanding of R4 agreement: P-MPR reporting has a separate prohibit timer. A separate value is configured for MPE reporting procedure per MAC entity.
* [030] Support a per MAC entity RRC configuration, whereby the MAC entity reports MPE related P-MPR only when such parameter or IE is configured (10/10)
* [030] For P-MPR threshold for absolute triggering, a separate value is configured for MPE reporting procedure per MAC entity (9/10).
* [030] FR2 MPE-related P-MPR reporting is an optional per-UE capability

[R2-2004341](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004341.zip) LS on MPE enhancements (R4-2005670; contact: Nokia) RAN4 LS in Rel-16 NR\_RF\_FR2\_req\_enh To:RAN2

[R2-2004906](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004906.zip) UE FR2 MPE enhancements and solutions Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_RF\_FR2\_req\_enh R2-2002684

[R2-2004932](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004932.zip) Discussion on MPE enhancements Ericsson discussion Rel-16 NR\_RF\_FR2\_req\_enh

[R2-2005126](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005126.zip) Considerations on MPE enhancement FR2 ZTE, Sanechips discussion Rel-16 NR\_RF\_FR2\_req\_enh

[R2-2005138](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005138.zip) L2/3 aspects of MPE mitigation InterDigital discussion Rel-16 NR\_RF\_FR2\_req\_enh

[R2-2004386](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004386.zip) Discussion on UE FR2 P-MPR reporting OPPO, Huawei discussion Rel-16 NR\_RF\_FR2\_req\_enh

[R2-2004650](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004650.zip) Discussion on the support of P-MPR report vivo discussion Rel-16 NR\_RF\_FR2\_req\_enh

Observation: The capability bit for the P-MPR MAC CE report can be per UE.

[R2-2004778](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004778.zip) P-MPR Reporting Apple discussion Rel-16 NR\_RF\_FR2\_req\_enh

[R2-2004387](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004387.zip) Draft Response LS on UE FR2 P-MPR reporting OPPO LS out Rel-16 NR\_RF\_FR2\_req\_enh To:RAN4

* [030] all 8 documents Noted.

[R2-2004907](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004907.zip) Introduction of MPE reporting for FR2 Nokia, Nokia Shanghai Bell CR Rel-16 38.331 16.0.0 1515 1 B NR\_RF\_FR2\_req\_enh R2-2002685

[R2-2004908](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004908.zip) Introduction of MPE reporting for FR2 Nokia, Nokia Shanghai Bell CR Rel-16 38.321 16.0.0 0707 1 B NR\_RF\_FR2\_req\_enh R2-2002686

[R2-2004909](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004909.zip) Introduction of MPE reporting for FR2 Nokia, Nokia Shanghai Bell CR Rel-16 38.306 16.0.0 0272 1 B NR\_RF\_FR2\_req\_enh R2-2002687

[R2-2004910](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004910.zip) Introduction of MPE reporting for FR2 Nokia, Nokia Shanghai Bell CR Rel-16 38.300 16.1.0 0210 1 B NR\_RF\_FR2\_req\_enh R2-2002688

[R2-2004936](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004936.zip) Implementing MPE enhancements Ericsson CR Rel-16 38.321 16.0.0 0748 - B NR\_RF\_FR2\_req\_enh

[R2-2004938](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004938.zip) Implementing MPE enhancements Ericsson CR Rel-16 38.331 16.0.0 1640 - B NR\_RF\_FR2\_req\_enh

[R2-2004939](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004939.zip) Implementing MPE enhancements Ericsson CR Rel-16 38.306 16.0.0 0322 - B NR\_RF\_FR2\_req\_enh

[R2-2005141](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005141.zip) Addition of MPE reporting InterDigital CR Rel-16 38.321 16.0.0 0751 - B NR\_RF\_FR2\_req\_enh

[R2-2005151](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005151.zip) Addition of MPE reporting InterDigital CR Rel-16 38.331 16.0.0 1652 - B NR\_RF\_FR2\_req\_enh

[R2-2004651](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004651.zip) Draft CR on supporting the P-MPR report vivo CR Rel-16 38.331 16.0.0 1617 - F NR\_RF\_FR2\_req\_enh

[R2-2004652](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004652.zip) Draft CR on supporting the P-MPR report vivo CR Rel-16 38.321 16.0.0 0745 - F NR\_RF\_FR2\_req\_enh

**Band66**

* [AT110-e][031][Other] BCS with asymmetric channel bandwidths (Huawei)

Scope: Treat R2-2005400, once LS from RAN4 is available.

Expected Outcome: Agreed CR.

[R2-2006125](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006125.zip) Reply LS on asymmetric channel bandwidths (R4-2008893; contact: Huwei) Rel-16 NR\_n66\_BW RAN2

* [031] Noted

[R2-2005399](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005399.zip) CR on introduction of BCS to asymmetric channel bandwidths (38.306) Huawei, HiSilicon, Telus CR Rel-16 38.306 16.0.0 0289 2 B NR\_n66\_BW R2-2004210

Was in-principe agreed

=> Revised in R2-2006272

[R2-2006272](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006272.zip) CR on introduction of BCS to asymmetric channel bandwidths (38.306) Huawei, HiSilicon, Telus CR Rel-16 38.306 16.0.0 0289 3 A NR\_n66\_BW

* [031] Agreed

[R2-2005400](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005400.zip) CR on introduction of BCS to asymmetric channel bandwidths (38.331) Huawei, HiSilicon, Telus CR Rel-16 38.331 16.0.0 1563 1 B NR\_n66\_BW R2-2003469

=> Revised in R2-2006273

R2-2006273 CR on introduction of BCS to asymmetric channel bandwidths (38.331) Huawei, HiSilicon, Telus CR Rel-16 38.331 16.0.0 1563 2 A NR\_n66\_BW

* [031] Agreed

R2-2006274 CR on introduction of BCS to asymmetric channel bandwidths (38.306) Huawei, HiSilicon, Telus CR Rel-15 38.306 15.9.0 0361 B NR\_n66\_BW

* [031] Agreed

R2-2006275 CR on introduction of BCS to asymmetric channel bandwidths (38.306) Huawei, HiSilicon, Telus CR Rel-15 38.331 15.9.0 1709 B NR\_n66\_BW

* [031] Agreed

EN-DC power class expansion

* [AT110-e][032][Other] EN\_DC power class expansion (T-Mobile USA)

Scope: Treat R2-2005209.

Expected Outcome: Agreed CR.

Deadline: June 10 0700 UTC.

[R2-2006126](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006126.zip) LS on new UE power class 1.5 (R4-2008906; contact: T-Mobile) Rel-16 LTE\_NR\_B41\_Bn41\_PC29dBm-Core RAN2

* [032] Noted

Moved here from 6.20

[R2-2005209](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005209.zip) Intraband EN\_DC power class expansion for 29 dBm T-Mobile USA Inc. draftCR Rel-16 38.331 16.0.0 C LTE\_NR\_B41\_Bn41\_PC29dBm, LTE\_NR\_B41\_Bn41\_PC29dBm-Core

R2-2006360 Intraband EN\_DC power class expansion for 29 dBm T-Mobile USA Inc. draftCR Rel-16 38.331 16.0.0 1 C LTE\_NR\_B41\_Bn41\_PC29dBm, LTE\_NR\_B41\_Bn41\_PC29dBm-Core

* [032] Endorsed, to be merged UE caps

**Temporary Boost – Not Treated**

[R2-2004509](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004509.zip) Temporary Boost Nokia, Nokia Shanghai Bell discussion Rel-16 R2-2002738

[R2-2004510](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004510.zip) LS on Temporary Boost Nokia LS out Rel-16 R2-2002739 To:SA4 Cc:RAN3, SA2

### 6.19.2 Corrections

Corrections to functionality previously introduced under this AI, i.e. introduced in R16 for WIs that doesn’t have a RAN WI or no time allocated in R2

## 6.20 NR TEI16 enhancements

Small Technical Enhancements to NR. TEI should be predominantly within a single WG and fully completed within the same quarter in all affected WGs. RAN2 impact of RAN1/4-led TEI shall be limited to RRC signalling of configuration parameters and UE capabilities (no MAC impact, no RRC procedural impact, etc). Please also see RP-191602 endorsed at RAN#84. Please submit to 6.20.x. NOTE that proponent companies are responsible to ensure that correct CRs are provided in all groups for proposals that have impact in >1 working group.

Time budget: 1 TU

Tdoc Limitation: 2 tdocs. NOTE for TEI, the tdoc limitation applies to new proposals, not to open proposals since previous meeting(s), nor to corrections.

### 6.20.1 RAN2 led TEI16 enhancements - Control plane related

#### 6.20.1.0 In-principle Agreed CRs

Need for Gap

[R2-2006127](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006127.zip) Reply LS on NeedForGap capability (R4-2008997; contact: MediaTek) Rel-16 TEI16 RAN2

* noted

DISCUSSION

- [025] Rap: Regarding to NeedForGap CRs, it appears that the new added sentence in field description of 36.331 CR is agreeable, so I uploaded it as R2-2006353. On the NR CRs, I also updated 38.331 CR based on ZTE’s comment. The change is to define the IE in inter-node section 11.2.1, it appear to be a small ASN.1 bug fixing and should be acceptable to other companies. The 38.331 CR is revised to R2-2006354. With that, I hope we can conclude the issue. Thanks for the companies who provide comments during the discussion.

[R2-2004806](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004806.zip) Introduction of NeedForGap capability for NR measurement - 36.306 MediaTek Inc. CR Rel-16 36.306 16.0.0 1730 2 B NR\_newRAT-Core, TEI16 R2-2002782

* [025] Agreed

[R2-2004807](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004807.zip) Introduction of NeedForGap capability for NR measurement - 36.331 MediaTek Inc. CR Rel-16 36.331 16.0.0 4197 4 B NR\_newRAT-Core, TEI16 R2-2002781

[R2-2006353](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006353.zip) Introduction of NeedForGap capability for NR measurement - 36.331 MediaTek Inc. CR Rel-16 36.331 16.0.0 4197 5 B NR\_newRAT-Core, TEI16 R2-2002781

* [025] Agreed

[R2-2004808](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004808.zip) Introduction of NeedForGap capability for NR measurement - 38.300 MediaTek Inc. CR Rel-16 38.300 16.1.0 0191 3 B NR\_newRAT-Core, TEI16 R2-2004160

* [025] Agreed

[R2-2004810](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004810.zip) Introduction of NeedForGap capability for NR measurement - 38.306 MediaTek Inc. CR Rel-16 38.306 16.0.0 0238 2 B NR\_newRAT-Core, TEI16 R2-2002785

=> Revised in R2-2006111

R2-2006111 Introduction of NeedForGap capability for NR measurement - 38.306 MediaTek Inc. CR Rel-16 38.306 16.0.0 0238 3 B NR\_newRAT-Core, TEI16

* [025] Endorsed, merged UE caps

[R2-2006110](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006110.zip) Capability of dynamic NeedForGap reporting MediaTek Inc. CR Rel-16 38.331 ..16.0.0 1702 B NR\_newRAT-Core, TEI16

* [025] Endorsed, merged UE caps

[R2-2004811](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004811.zip) Introduction of NeedForGap capability for NR measurement - 38.331 MediaTek Inc. CR Rel-16 38.331 16.0.0 1453 4 B NR\_newRAT-Core, TEI16 R2-2004161 Revised

[R2-2005693](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005693.zip) Introduction of NeedForGap capability for NR measurement - 38.331 MediaTek Inc. CR Rel-16 38.331 16.0.0 1453 5 B NR\_newRAT-Core, TEI16 [R2-2004811](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004811.zip) Late

[R2-2006354](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006354.zip) Introduction of NeedForGap capability for NR measurement - 38.331 MediaTek Inc. CR Rel-16 38.331 16.0.0 1453 5 B NR\_newRAT-Core, TEI16 [R2-2004811](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004811.zip) Late

* [025] Agreed

Upper Layer Indication

[R2-2005308](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005308.zip) upperLayerIndication enhancements Huawei, HiSilicon, BT, Samsung CR Rel-16 36.331 16.0.0 4266 2 C NR\_newRAT-Core, TEI16 R2-2004264

> Revised in R2-2006081

[R2-2006081](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006081.zip) upperLayerIndication enhancements Huawei, HiSilicon, BT, Samsung CR Rel-16 36.331 16.0.0 4266 3 C NR\_newRAT-Core, TEI16

* [025][201] Agreed

#### 6.20.1.1 Open / ongoing proposals

Including outcome of email discussion [Post109bis-e][050][TEI16] Overheating (Huawei)

Including outcome of email discussion [Post109bis-e][051][TEI16] EN-DC cell reselection (CMCC)

Including outcome of email discussion [Post109bis-e][962][TEI16] Under-reporting CSI-RS Capabilities (NTT Docomo)

**Overheating**

Treat by email

* [AT110-e][033][Other] Overheating (Huawei)

Scope: Treat R2-2005401, R2-2005404, R2-2005402, R2-2005403 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

[R2-2005401](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005401.zip) Report for [Post109bis-e][050][TEI16] Overheating Huawei, Huawei Device discussion Rel-16 TEI16 Late

DISCUSSION and Decision at Half time

- [033] Docomo and Nokia has concerns on P3, so it is not included below.

* [033] In (NG)EN-DC, the new field for overheating assistance information in LTE RRC (TS36.331) refers to the NR *OverheatingAssistance* IE as specified in TS 38.331.
* [033] In (NG)EN-DC, if the new field for NR overheating assistance information encapsulated in LTE message is reported by the UE, the MN forwards this encapsulated information to the SN.
* [033] In (NG)EN-DC, the interpretation for the Rel-15 legacy overheating IE (i.e. *reducedCCsDL/UL*) is not changed, i.e. it is always interpreted as the preference for both MCG and SCG.
* [033] In (NG)EN-DC, introduce a new UE capability in LTE capability container for the new field (i.e. overheating assistance information for SCG) in LTE assistance information message.
* [033] In (NG)EN-DC, MN determines the configuration for overheating assistance information for SCG. The configuration for the new overheating IE comes together with the configuration for the legacy overheating IE.
* [033] UE can report *reducedMaxCCs* in both legacy overheating IE (overheatingAssistance-r14) and new overheating IE (overheatingAssistanceForSCG-r16), *reducedMaxCCs* in legacy IE is intended for MCG+SCG, *reducedMaxCCs* in new IE is intended for only SCG.
* [033] SN indicating/suggesting whether to enable the new overheating information reporting for SCG is not supported in TEI16.
* [033] SN proposed value of *reducedMaxCCs* in *CG-Config* is not supported in TEI16.
* [033] The UE supporting new overheating assistance information for SCG shall also indicate support of legacy *overheatingInd*.
* [033] The reporting of new overheating field and legacy overheating field are controlled by one shared prohibit timer.

[R2-2005404](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005404.zip) 36.306 CR for overheating in (NG)EN-DC and NR-DC Huawei, Huawei Device CR Rel-16 36.306 16.0.0 1765 - F TEI16 Late

[R2-2005402](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005402.zip) 36.331 CR for overheating in (NG)EN-DC and NR-DC Huawei, Huawei Device CR Rel-16 36.331 16.0.0 4324 - F TEI16 Late

=> Revised in R2-2006276

R2-2006276 36.331 CR for overheating in (NG)EN-DC and NR-DC Huawei, Huawei Device CR Rel-16 36.331 16.0.0 4324 1 F TEI16

[R2-2005403](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005403.zip) 38.331 CR for overheating in (NG)EN-DC and NR-DC Huawei, Huawei Device CR Rel-16 38.331 16.0.0 1671 - F TEI16 Late

=> Revised in R2-2006277

R2-2006277 38.331 CR for overheating in (NG)EN-DC and NR-DC Huawei, Huawei Device CR Rel-16 38.331 16.0.0 1671 1 F TEI16

* [Post110-e][033][Other] Overheating (Huawei)

Scope: Email approval

Intended outcome: Agreed CRs

Deadline: short

Further Enhancement – not to be treated

[R2-2005417](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005417.zip) Consideration on overheating assistance from the perspective of time-domain allocation Samsung discussion

**EN-DC Cell Reselection**

Treat by email

* [AT110-e][034][Other] EN-DC Cell Reselection (CMCC)

Scope: Treat R2-2005436, R2-2005600, R2-2005599, R2-2005598 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

[R2-2005436](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005436.zip) Report for [Post109bis-e][051][TEI16] EN-DC cell reselection CMCC discussion Rel-16 TEI16

* [034] Noted

The CRs to 36304 and 36306 has been agreed in principle last meeting

[R2-2005439](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005439.zip) Introduce of alternative cell reselection priority for EN-DC CMCC, SoftBank, Ericsson, Huawei, ZTE, CATT, vivo, OPPO CR Rel-16 36.306 16.0.0 1755 1 B TEI16 R2-2003493 Revised

R2-2005600 Introduce of alternative cell reselection priority for EN-DC CMCC, SoftBank, Ericsson, Huawei, ZTE, CATT, vivo, OPPO, Samsung CR Rel-16 36.306 16.0.0 1755 2 B TEI16 [R2-2005439](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005439.zip) Late

=> Revised inn R2-2006326

R2-2006326 Introduce of alternative cell reselection priority for EN-DC CMCC, SoftBank, Ericsson, Huawei, ZTE, CATT, vivo, OPPO, Samsung CR Rel-16 36.306 16.0.0 1755 3 B TEI16

* [034] Agreed

[R2-2005438](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005438.zip) Introduce of alternative cell reselection priority for EN-DC CMCC, SoftBank, Ericsson, Huawei, ZTE, CATT, vivo, OPPO CR Rel-16 36.304 16.0.0 0782 2 B TEI16 R2-2003492 Revised

R2-2005599 Introduce of alternative cell reselection priority for EN-DC CMCC, SoftBank, Ericsson, Huawei, ZTE, CATT, vivo, OPPO, Samsung CR Rel-16 36.304 16.0.0 0782 3 B TEI16 [R2-2005438](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005438.zip) Late

=> Revised in R2-2006194

R2-2006194 Introduce of alternative cell reselection priority for EN-DC CMCC, SoftBank, Ericsson, Huawei, ZTE, CATT, vivo, OPPO, Samsung CR Rel-16 36.304 16.0.0 0782 4 B TEI16

* [034] Agreed

CR to 36331

[R2-2005437](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005437.zip) Introduce of alternative cell reselection priority for EN-DC CMCC, SoftBank, Ericsson, Huawei, ZTE, CATT, vivo CR Rel-16 36.331 16.0.0 4229 2 B TEI16 R2-2003491 Revised

R2-2005594 Introduce of alternative cell reselection priority for EN-DC CMCC, SoftBank, Ericsson, Huawei, ZTE, CATT, vivo, Samsung CR Rel-16 36.331 16.0.0 4229 3 B TEI16 [R2-2005437](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005437.zip) Late

R2-2005595 Introduce of alternative cell reselection priority for EN-DC CMCC, SoftBank, Ericsson, Huawei, ZTE, CATT, vivo, Samsung CR Rel-16 36.331 16.0.0 4229 4 B TEI16 [R2-2005437](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005437.zip) Late

R2-2005598 Introduce of alternative cell reselection priority for EN-DC CMCC, SoftBank, Ericsson, Huawei, ZTE, CATT, vivo, Samsung CR Rel-16 36.331 16.0.0 4229 5 B TEI16 [R2-2005437](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005437.zip) Late

=> Revised in R2-2006193

R2-2006193 Introduce of alternative cell reselection priority for EN-DC CMCC, SoftBank, Ericsson, Huawei, ZTE, CATT, vivo, Samsung CR Rel-16 36.331 16.0.0 4229 6 B TEI16

* [034] Agreed

Overlaps with input email discussion – not to be treated

[R2-2004506](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004506.zip) Further discussion on EN-DC cell reselection issue vivo discussion

[R2-2004507](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004507.zip) CR for EN-DC cell reselection issue vivo CR Rel-16 36.331 16.0.0 4296 - B NR\_newRAT-Core

[R2-2005538](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005538.zip) Considerations on alternative priorities for EN-DC cell reselection LG Electronics Inc. discussion Rel-16 TEI16

[R2-2005543](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005543.zip) CR for 36.304 for EN-DC cell reselection LG Electronics France CR Rel-16 36.304 16.0.0 0802 - B TEI16

[R2-2005549](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005549.zip) CR for 36.331 CR for EN-DC cell reselection LG Electronics France CR Rel-16 36.331 16.0.0 4337 - B TEI16

**Under-reporting CSI-RS**

Treat by email

* [AT110-e][070][Other] Under-reporting CSI-RS (NTT DOCOMO)

Scope: Treat R2-2004983, R2-2004984, R2-2004985 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

[R2-2004983](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004983.zip) Report of email discussion [Post109bis-e][962][TEI16] Under-reporting CSI-RS Capabilities NTT DOCOMO, INC. report Rel-16 NR\_newRAT-Core, TEI16 Late

* [070] Noted

DISCUSSION

- Early implementable or not

- China Unicom support to have this early implementable. Vodafone also support. CMCC agrees as well.

- Intel think we postponed the early impl mechanism for NR.

- Huawei agrees that we need to discuss the general principle, but think the discussions can be separate.

- intel think there was also a proposal for NPN but it was postponed. Huawei think that wasn’t just because the R2 mechanism, but bec of CN impact. Huawei think that High Speed item has agreed early impl.

- Ericsson think this shall not be designed on the fly, we determine impact next meeting. Docomo would be ok to wait. Samsung as well. Docomo wonders if this function would be optional of mandatory. Huawei think it is optional,

- Tmobile US think it can then be implemented by a Rel-15 CR.

* Solution to Under-reporting CSI-RS can support early implementation by R15 UEs.
* Need to determine mechanism / impact of early implementation next meeting.

[R2-2004984](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004984.zip) Extension of CSI-RS capabilities per codebook type NTT DOCOMO, INC. CR Rel-16 38.331 16.0.0 1451 2 C NR\_newRAT-Core, TEI16 R2-2002351 Late

=> Revised in R2-2006203

R2-2006203 Extension of CSI-RS capabilities per codebook type NTT DOCOMO, INC. CR Rel-16 38.331 16.0.0 1451 3 C NR\_newRAT-Core, TEI16

* [070] Agreed

[R2-2004985](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004985.zip) Extension of CSI-RS capabilities per codebook type NTT DOCOMO, INC. CR Rel-16 38.306 16.0.0 0237 2 C NR\_newRAT-Core, TEI16 R2-2002352 Late

=> Revised in R2-2006204

[R2-2006204](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006204.zip) Extension of CSI-RS capabilities per codebook type NTT DOCOMO, INC. CR Rel-16 38.306 16.0.0 0237 3 C NR\_newRAT-Core, TEI16

* [070] Agreed

**Not Yet Agreed**

Treated by email [035]

[R2-2005159](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005159.zip) Missing reportAddNeighMeas in periodic measurement reporting Nokia, Nokia Shanghai Bell, Ericsson, NTT DOCOMO CR Rel-16 38.331 16.0.0 1290 3 F TEI16 R2-2003109

- [035] Chair: Conclusion is that UE capability is needed

* [035] The contents of this CR can be regarded agreed in principle
* [Post110-e][035][TEI16] reportAddNeighMeas periodic (Nokia)

Scope: Define a UE capability for function in [R2-2005159](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005159.zip). Agree the set.

Intended outcome: Finally Agreed CRs 38331 38306

Deadline: Short

* [AT110-e][035][TEI16] New Proposals (R2 Chairman)

Scope: Treat R2-2005159, R2-2005175, R2-2004535, R2-2004536, R2-2004537, R2-2004538, R2-2004539, R2-2005121, R2-2005184, R2-2004618, R2-2004863, R2-2005662, R2-2004601, R2-2004512, R2-2004514, R2-2004516, R2-2004519 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes. Deadline: June 5, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs (may split the email discussion). Deadline: EOM

[R2-2006106](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006106.zip) [Report of offline 35] Chairiman report Rel-16 TEI16

DISCUSSION

P3

- QC think that R17 may be too late. QC thikn that the operators are not here.

- Firstnet think this is very important for public safety. AT&T think this need to be in Rel-16. LG understand but think 3GPP working procedures need to be respected and think it cannot be done in Rel16, it is too large that this is obvious.

P4

- QC think this is important, and think most UE vendors/chipset vendors support this, and think it is optional for the network.

- Nokia wonder if the intention is that we make the requirement in R4 more strict. QC think that current R4 requirement is for the case of non-overlapping bands. QC thikn there is no R4 impact.

- Docomo don't have a strong objection but it would be good to know the gain in more detail. MTK think this would depend on implementation and depend on RF hardware, and think R4 requirement is general and don’t need to be changed. LG agree with MTK and point out that this would be optional and support. Apple support as well.

- vivo understand that UE could have different RSRP measurement depending on band.

- Nokia think the R4 requirement anyway has to be met, and think an LS to R4 is needed. Nokia think R4 need to agree to this.

- QC propose to conditionally agree the CR and send LS to R4 for checking. Nokia think this is not ok.

5-2

- Chair asks if we can agree to R2-2004950

- MTK think this doesn’t really resolve the issue, as RRC anyway processes messages one-by-one.

- ZTE think that the CR in R2-2004950 don't really propose this but instead just adds delay.

- Seems difficult to agree.

- Nokia think that the intention is indeed that in any case the network could provide grant is the network knows the processing delay.

- Oppo support combined procedure.

P6

- FW thikn the change can be somewhat different. Chair think this can be discuss offline.

P7

- Samsung think there is no critical issue. LG think the problem is that in current RLC there may be retransnmissions pending when RLC is reactivated.

- Huawei think this is a corner case and think network can resolve this. LG think proactive status reports can be lost, and think also the network may not know the last PDU, and think there is anyway remaining issues.

- LG request to discuss one more round by email.

8-2

- Samsung don’t want to mix the 2step RACH and BFR. LG think the new MAC CE is only fo r2step RACH and think we need to think more. Samsung think nothing is broken in the current spec, and think there is no need. ZTE think that introduction of a new UE cap is ok.

- Vivo think a new UE cap is possible.

- Nokia still think there is an issue with the R15 command and would be happy to consider the new MAC CE. Apple agrees that we should consider the new MAC CE.

AGREEMENTS on-line, Part 1

* Support is added for reportAddNeighMeas in periodic measurement reporting. Continue discussion on how to support introduction of this change: mandatory R16/optional R16/need IOT-bit R16, and the related CR updates.
* Agree to support SN request of measurement identities. Continue to work on CR(s).
* Standardization for Simultaneous NR Unicast and LTE MBMS in Rel-16 can be pursued if there are decisions at RP to go ahead (R2 cannot decide based on comments on impact).
* Will not have freqBandIndicator in NR redirection in Rel-16.
* The proposal to Update the reestablishment procedure is not pursued.
* Agree that we have the CR on PDCP security issue about duplicate detection. Further discuss whether modifications to the CR text are needed.
* Can have one more round of email discussion on the Retransmission of an RLC SDU with a poll after discard.
* The proposal on CFRA resource handling for BFR upon TAT expiry is not pursued.
* Can discuss whether anything is needed in order to apply the new R16 TAC MAC CE in this case (e.g. which UE capability is this MAC CE related to?)

DISCUSSION PART 2 by EMAIL only [035]

- [035] ON R2-2005159, UE cap for Missing reportAddNeighMeas in periodic measurement   
Chair Comment: I do have some sympathy for making reportAddNeighMeas in periodic measurement simply mandatory without overhead. However when making this kind of fixes, regardless original intention, we usually grant requests from objecting UE vendors to have IOT/Capability bit. One UE vendor think this addition is not acceptable without UE cap/IoT

- [035] ON R2-2005662 Retransmission of an RLC SDU with a poll after discard procedure   
Chair Comment: Based on answers to Q1 and Q3: In the outlined duplication scenario, The UE RLC protocol may indeed get stuck. Half of the companies think we don’t need to do anything and assumes that this is a temporary condition that is resolved by a deactivation/activation, and while the condition persist the other duplication leg provides an ok connection. Another potential issue that an old packet sitting in the buffer being transmitted at activation is seen by most companies as a non-issue. One company think this may cause HFN desync. About half of the companies think this is a real problem that is worth fixing and other prefer to do nothing, and a cpl of companies clearly object.

- [035] From discussion on R2-2004601 CFRA resource handling for BFR upon TAT expiry, wheter to apply the new R16 TAC MAC CE to BFR instead.   
Chair comment: 2 companies clearly support, 3 are ok, 2 are hesitant, and 1 company strongly object. It seems this can be handled by the network, at the cost of additional RACH, and several companies think this is rare. Given this situation this enhancement cannot be agreed.

* [035] For reportAddNeighMeas in periodic measurement reporting a UE capability is added, to be interpreted as an IoT bit (i.e. Mandatory with capability signalling).
* [035] Retransmission of an RLC SDU with a poll after discard is not pursued in R16
* [035] The new R16 TAC MAC CE (for 2-step RACH) is not applicable to BFR in R16

[R2-2005662](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005662.zip) Retransmission of an RLC SDU with a poll after discard procedure LG Electronics Inc., Ericsson, NTT Docomo, LG Uplus, Sharp discussion Rel-16 TEI16 R2-2002998

* [035] Not pursued

[R2-2004601](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004601.zip) CFRA resource handling for BFR upon TAT expiry Nokia, Nokia Shanghai Bell, Apple, ASUSTek discussion Rel-16 TEI16

* [035] Not Pursued

#### 6.20.1.2 New proposals

Inter Node Request of measurement identities

Treated by email [035]

[R2-2005175](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005175.zip) Introduction of SN request of measurement identities in INM Ericsson, NEC, ZTE Corporation, Sanechips, Vivo, Softbank, Turkcell, Deutsche Telekom, NTT DOCOMO INC., China Unicom, Qualcomm Incorporated, InterDigital discussion Rel-16 TEI16

[R2-2006117](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006117.zip) Correction on MN-SN measurements coordination in INM Ericsson, NEC, ZTE Corporation, Sanechips, Vivo, Softbank, Turkcell, Deutsche Telekom, NTT DOCOMO INC., China Unicom, Qualcomm Incorporated, InterDigital CR Rel-16 38.331 16.0.0 1703 - F TEI16

=> Revised in R2-2006212

[R2-2006212](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006212.zip) Correction on MN-SN measurements coordination in INM Ericsson, NEC, ZTE Corporation, Sanechips, Vivo, Softbank, Turkcell, Deutsche Telekom, NTT DOCOMO INC., China Unicom, Qualcomm Incorporated, InterDigital CR Rel-16 38.331 16.0.0 1703 1 F TEI16

* [035] Agreed

[R2-2006118](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006118.zip) Correction on MN-SN measurements coordination in INM Ericsson, NEC, ZTE Corporation, Sanechips, Vivo, Softbank, Turkcell, Deutsche Telekom, NTT DOCOMO INC., China Unicom, Qualcomm Incorporated, InterDigital CR Rel-16 37.340 16.1.0 0208 - F TEI16

=> Revised in R2-2006213

[R2-2006213](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006213.zip) Correction on MN-SN measurements coordination in INM Ericsson, NEC, ZTE Corporation, Sanechips, Vivo, Softbank, Turkcell, Deutsche Telekom, NTT DOCOMO INC., China Unicom, Qualcomm Incorporated, InterDigital CR Rel-16 37.340 16.1.0 0208 1 F TEI16

* [035] Agreed

Simultaneous NR Unicast and LTE MBMS

Treated by email [035]

[R2-2004535](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004535.zip) Mechanisms to enable simultaneous operation of NR Unicast + LTE MBMS Qualcomm Incorporated, FirstNet, AT&T, Telstra, Academy of Broadcasting Science, Shanghai Jiao Tong University, British Broadcasting Corporation, European Broadcasting Union, Institut für Rundfunktechnik discussion Rel-16 TEI16

[R2-2004536](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004536.zip) Introduction of simultaneous operation of NR Unicast + LTE MBMS Qualcomm Incorporated, FirstNet, AT&T, Telstra, Academy of Broadcasting Science, Shanghai Jiao Tong University, British Broadcasting Corporation, European Broadcasting Union, Institut für Rundfunktechnik CR Rel-16 38.300 16.1.0 0228 - B TEI16

[R2-2004537](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004537.zip) Introduction of simultaneous operation of NR Unicast + LTE MBMS Qualcomm Incorporated, FirstNet, AT&T, Telstra, Academy of Broadcasting Science, Shanghai Jiao Tong University, British Broadcasting Corporation, European Broadcasting Union, Institut für Rundfunktechnik CR Rel-16 38.304 16.0.0 0159 - B TEI16

[R2-2004538](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004538.zip) Introduction of simultaneous operation of NR Unicast + LTE MBMS Qualcomm Incorporated, FirstNet, AT&T, Telstra, Academy of Broadcasting Science, Shanghai Jiao Tong University, British Broadcasting Corporation, European Broadcasting Union, Institut für Rundfunktechnik CR Rel-16 38.306 16.0.0 0310 - B TEI16

[R2-2004539](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004539.zip) Introduction of simultaneous operation of NR Unicast + LTE MBMS Qualcomm Incorporated, FirstNet, AT&T, Telstra, Academy of Broadcasting Science, Shanghai Jiao Tong University, British Broadcasting Corporation, European Broadcasting Union, Institut für Rundfunktechnik CR Rel-16 38.331 16.0.0 1611 - B TEI16

FreqBandIndicator in NR redirection

Treated by email [035]

[R2-2005121](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005121.zip) CR to 38.331 on missing freqBandIndicator in NR redirection Qualcomm Incorporated, Ericsson, MediaTek Inc., ZTE Corporation, Sanechips, Apple, Intel, OPPO draftCR Rel-16 38.331 16.0.0 F TEI16

[R2-2005184](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005184.zip) CR to 36.331 on missing freqBandIndicator in NR redirection Qualcomm Incorporated, Ericsson, MediaTek Inc., ZTE Corporation, Sanechips, Apple, Intel, OPPO draftCR Rel-16 36.331 16.0.0 F TEI16

Reestablishment

Treated by email [035]

[R2-2004618](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004618.zip) Updates to reestablishment procedure ZTE Corporation, Sanechips, Intel Corporation, CATT, Mediatek CR Rel-16 38.331 16.0.0 1143 6 C TEI16 R2-2002970

Proposals with < 4 proponents

Not Treated

[R2-2004872](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004872.zip) SRB only connection enhancement for PDU session change CATT,Huawei, HiSilicon discussion Rel-16 TEI16 R2-2002792

[R2-2004873](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004873.zip) SRB only connection ehancement option 1 CATT,Huawei, HiSilicon draftCR Rel-16 38.331 16.0.0 F TEI16 R2-2002793

[R2-2004949](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004949.zip) On combined RRC procedures Nokia, Nokia Shanghai Bell, Ericsson discussion Rel-16 TEI16 R2-2002927

[R2-2004950](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004950.zip) RRC processing delays for combined procedures Nokia, Nokia Shanghai Bell, Ericsson CR Rel-16 38.331 16.0.0 1288 4 F TEI16 R2-2002928

[R2-2004592](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004592.zip) Maximum Number of DRBs and RLC entities Nokia, Nokia Shanghai Bell discussion Rel-16 R2-2003403

[R2-2004715](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004715.zip) Measurement priority handling in NR Ericsson discussion

[R2-2004834](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004834.zip) Additional UE capability filtering to limit the total number of carriers in NR Samsung discussion Rel-16 TEI16 R2-2002884

[R2-2005423](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005423.zip) On the support of NG-based (i.e. via CN) handover using CGI report Huawei, HiSilicon discussion Rel-16 TEI16 R2-2003476

[R2-2005697](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005697.zip) Introduction of New Measurement Gap Configuration vivo discussion

[R2-2005702](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005702.zip) CR to 38.331 on New Measurement Gap Configuration vivo CR Rel-16 38.331 16.0.0 1690 - F NR\_newRAT-Core, TEI16

[R2-2004447](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004447.zip) Remaining issue on EPS voice fallback enhancement LG Uplus discussion Rel-16

[R2-2004781](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004781.zip) UE Information for 0-PDCCH Apple discussion Rel-16 38.331 TEI16

Withdrawn:

R2-2004569 Clarification on providing network specific uac-AccessCategory1-SelectionAssistanceInfo ZTE Corporation, Sanechips, CMCC discussion Rel-16 NR\_newRAT-Core R2-2002764

R2-2004570 CR on providing network specific uac-AccessCategory1-SelectionAssistanceInfo ZTE Corporation, Sanechips CR Rel-16 38.331 16.0.0 1520 1 F NR\_newRAT-Core R2-2002765

#### 6.20.1.3 Corrections

Corrections to functionality previously introduced as TEI16, Treated by email

* [AT110-e][036][TEI16] TEI16 corrections (OPPO)

Scope: Treat R2-2004526, R2-2004527, R2-2005614, R2-2004388, R2-2004438, R2-2005429, R2-2004393 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes. Deadline: June 4, 0700 UTC.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

[R2-2006077](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006077.zip) Email report of [AT110e][036][TEI16] TEI16 corrections (OPPO) OPPO discussion

* [036] Noted, decisions see below

**MPS and MCS**

[R2-2004526](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004526.zip) Corrections to PRACH prioritization procedure for MPS and MCS Samsung Electronics Co., Ltd CR Rel-16 38.321 16.0.0 0705 1 F TEI16 R2-2002560

* [036] Half time, CR is agreeable, can work on the details

=> Revised in R2-2006180

[R2-2006180](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006180.zip) Corrections to PRACH prioritization procedure for MPS and MCS Samsung Electronics Co., Ltd CR Rel-16 38.321 16.0.0 0705 2 F TEI16

* [036] Agreed

[R2-2004527](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004527.zip) Corrections to PRACH prioritization procedure for MPS and MCS Samsung Electronics Co., Ltd CR Rel-16 38.331 16.0.0 1506 1 F TEI16 R2-2002561

- [036] Chair, Half time, some objections significant support. Rapporteur suggests to continue discussion.

=> Revised in R2-2006181

[R2-2006181](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006181.zip) Corrections to PRACH prioritization procedure for MPS and MCS Samsung Electronics Co., Ltd CR Rel-16 38.331 16.0.0 1506 2 F TEI16

* [036] Agreed

*Move from 6.20.2.3*

[R2-2005614](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005614.zip) CR to 38321 on RACH Prioritization for MPS and MCS vivo CR Rel-16 38.321 16.0.0 0756 - F NR\_newRAT-Core, TEI16

[R2-2006154](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006154.zip) CR to 38321 on RACH Prioritization for MPS and MCS vivo CR Rel-16 38.321 16.0.0 0756 1 F NR\_newRAT-Core, TEI16

* [036] Agreed

**SMTC2**

[R2-2004388](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004388.zip) additional SSB-ToMeasure for smtc2-LP OPPO, ZTE,CMCC discussion Rel-16 TEI16

* [036] Noted, Proposal is not agreed (no need to treat CRs)

R2-2006082 Correction on additional SSB-ToMeasure for smtc2-LP OPPO CR Rel-16 38.331 16.0.0 1698 F TEI16

Voice fallback

[R2-2004438](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004438.zip) Correction on establishment cause value upon enhanced EPS voice fallback Qualcomm Incorporated CR Rel-16 36.331 16.0.0 4236 1 F TEI16 R2-2002581

* [036] Half time, CR can be agreed as-is except for cover page update, Revised.

=> Revised in R2-2006308

R2-2006308 Correction on establishment cause value upon enhanced EPS voice fallback Qualcomm Incorporated CR Rel-16 36.331 16.0.0 4236 2 F TEI16

* [036] Agreed

HO to EN-DC

[R2-2005429](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2005429.zip) CR to 36.300 on support of inter-RAT HO from SA to EN-DC Huawei, HiSilicon CR Rel-16 36.300 16.1.0 1286 - F TEI16

* [036] Half time, CR can be agreed as-is except for cover page update, Revised

=> Revised in R2-2006076

[R2-2006076](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006076.zip) CR to 36.300 on support of inter-RAT HO from SA to EN-DC Huawei, HiSilicon CR Rel-16 36.300 16.1.0 1286 1 F TEI16

* [036] Agreed

NeedForGap

[R2-2004393](file:///D:/Documents/3GPP/tsg_ran/WG2/RAN2/2005_R2_110-e/Docs/R2-2004393.zip) Discussion on update of NeedForGap OPPO discussion Rel-16 TEI16

Chair: P3 is clearly beyond correction and is not to be treated

* [036] NeedForGap reporting, i.e. *needForGapsInfoNR* is forwarded to the target node during HO in *HandoverPreparationInformation* iner-node message.
* [036] Chairman notes clarification only: If *needForGapsConfigNR* is not included in RRCReconfiguraiton message, the UE will use the *needForGapsConfigNR* configured in prior RRCReconfiguration message or RRCResume message if configured.
* [036] Chairman notes clarification only: If NeedForGapsInfoNR is not included in RRCReconfigurationComplete message, the network will consider the last NeedForGap reporting is valid if received.

R2-2006083 Adding needForGapsInfoNR in HandoverPreparationInformation OPPO CR Rel-16 38.331 16.0.0 1699 F TEI16

* [036] contents agreed, merged with main needforgap RRC CR (MTK)

To be handled in the positioning session

[R2-2004792](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004792.zip) Update B1I signal ICD file to v3.0 in BDS system in A-GNSS CATT, CAICT, Huawei, ZTE Corporation CR Rel-16 36.305 16.0.0 0088 - F TEI16

[R2-2004793](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004793.zip) Update B1I signal ICD file to v3.0 in BDS system in A-GNSS CATT, CAICT, Huawei, ZTE Corporation CR Rel-16 37.355 16.0.0 0259 - F TEI16

[R2-2004794](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004794.zip) Update B1I signal ICD file to v3.0 in BDS system in A-GNSS CATT, CAICT, Huawei, ZTE Corporation CR Rel-16 38.305 16.0.0 0024 - F TEI16

### 6.20.2 RAN2 led TEI16 enhancements - User plane related

#### 6.20.2.0 In-principle Agreed CRs

#### 6.20.2.1 Open / ongoing proposals

Including outcome of email discussion [Post109bis-e][054][TEI16] Secondary DRX (Ericsson)

Secondary DRX

Treat by email. If needed treat controversial proposals on-line.

* [AT110-e][037][TEI16] Secondary DRX (Ericsson)

Scope: Treat R2-2004325, R2-2004364, R2-2005729 and Aspects that do not overlap with email discussion of: R2-2004856, R2-2004553, R2-2004640, R2-2004786 (proponents are responsible to explain and drive)

Part 1: Identify agreeable changes, and make agreements as far as possible. Deadline: June 4, 0700 UTC. Possibly if needed can be revisited on-line.

Part 2: For agreeable parts, continuation to agree CRs. Deadline: June 10, 0700 UTC

R2-2006156 Email report [AT110e][037][TEI16] Secondary DRX (Ericsson) Ericsson discussion Rel-16 TEI16

=> Revised in R2-2006331

R2-2006331 Email report [AT110e][037][TEI16] Secondary DRX (Ericsson) Ericsson discussion Rel-16 TEI16

* Noted

[R2-2004364](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004364.zip) Reply LS on secondary DRX group for FR1+FR2 CA (R4-2005296; contact: Apple) RAN4 LS in Rel-16 TEI16 To:RAN2, RAN1

* Noted

[R2-2004325](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004325.zip) LS response on secondary DRX group (R1-2002961; contact: Ericsson) RAN1 LS in Rel-16 TEI16 To:RAN2 Cc:RAN4

* Noted

DISCUSSION on-line

- Huawei think R1 can not conclude on some issues and wonder if we can have Sec DRX in Rel-16.

- Ericsson explains that this has been discussed by email, and think if Secondary DRX is supported without DCP/WUS and without Scell dormancy then there are no such dependencies.

- Ericsson further think there are solutions so that CSI-RS measurements etc work.

- Samsung agrees with ericsson and think we can agree.

- LG point out that R1 didn’t conclude at all, and think that furthermore R4 pointed to scenarios where Sec DRX is not useful. LG furher think there are different views in R2 on how it shall work. ZTE has similar concerns as LG.

- QC think Secondary DRX is very important and cannot be postponed. QC think that majority of companies think it can be done. Apple shares QC view. Ericsson agrees that power saving for FR2 is very important.

- Xiaomi wonder why not Scell dormancy can achieve the same as Secondary DRX for FR2 SCell. Ericsson think Sec DRX is a simple solution. QC think Verizon stated that SCell dormancy is new and a new feature takes some time to deploy, and Sec DRX is easier to deploy. QC think that Sec DRX and SCell dormancy will operate on different time scale.

- Huawei think this need to be as simple as possible, but think it cannot be used with WUS and SCell dormancy, and think this is a major issue.

- Verizon clarifies that Power Saving is needed and Sec DRX as impacting only higher layer can be a quick solution that is easy to deploy. Vodafone agrees this is useful. Intel also support to have this in Rel-16.

- MTK agrees on the scenario and it is needed, but think that as simple as possible is often not so simple, have some doubts and think the RP agreed WIs should have higher priority than TEI. Vivo think R16 power saving is more important than TEI16.

- AT&T, TMO US, KDDI, FirstNet and DT support chair proposal to continue the work for now and let RP decide finally.

- CATT think we still have open issues.

- Nokia think that if it is not agreed at this meeting is it postponed to Rel-17. Docomo also think Stage-3 is frozen this month and think a new feature cannot be introduced after that. Chiar think that if R1 has replied that they could accept the impact we could have decided to go ahead.

* R2 continue to develop the solution and CRs at current meeting, endorse if possible, solutions to be simple, and have minimal R1 impact (as far as we can tell). Whether to have this in R16 or not for decision at RP.

[R2-2004855](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004855.zip) Email report of [PostAT109bis-e][054][TEI16] Secondary DRX Ericsson report Rel-16 NR\_newRAT-Core

=> Revised in [R2-2005729](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005729.zip)

[R2-2005729](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005729.zip) Email report of [PostAT109bis-e][054][TEI16] Secondary DRX Ericsson report Rel-16 NR\_newRAT-Core

[R2-2004856](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004856.zip) Introduction of secondary DRX group Ericsson discussion Rel-16 NR\_newRAT-Core

[R2-2004553](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004553.zip) Further considerations on secondary DRX group OPPO discussion Rel-16

[R2-2004640](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004640.zip) Views on TEI for Secondary DRX Group vivo discussion Rel-16 TEI16

[R2-2004786](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004786.zip) Views on introduction of Dual DRX Xiaomi Communications discussion

* [037] All docs grouped above are Noted

CRs

[R2-2004857](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004857.zip) Introduction of secondary DRX group Ericsson, Qualcomm, Samsung, InterDigital, Deutsche Telekom, Verizon CR Rel-16 38.306 16.0.0 0321 - C NR\_newRAT-Core

[R2-2004858](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004858.zip) Introduction of secondary DRX group Ericsson, Qualcomm, Samsung, InterDigital, Deutsche Telekom, Verizon CR Rel-16 38.321 16.0.0 0746 - C NR\_newRAT-Core

=> Revised in R2-2006332

R2-2006332 Introduction of secondary DRX group Ericsson CR Rel-16 38.321 16.0.0 0746 1 C NR\_newRAT-Core

[R2-2004859](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004859.zip) Introduction of secondary DRX group Ericsson, Qualcomm, Samsung, InterDigital, Deutsche Telekom, Verizon CR Rel-16 38.331 16.0.0 1632 - C NR\_newRAT-Core

=> Revised in R2-2006333

R2-2006333 Introduction of secondary DRX group Ericsson CR Rel-16 38.331 16.0.0 1632 1 C NR\_newRAT-Core

* [Post110-e][037][TEI16] Secondary DRX (Ericsson)

Intended outcome: Final Endorsement of CRs to RP

Deadline: Short

Not treated

[R2-2004554](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004554.zip) CR to 38.321 on introduction of secondary DRX group OPPO CR Rel-16 38.321 16.0.0 0741 - B TEI16

[R2-2004555](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004555.zip) CR to 38.331 on introduction of secondary DRX group OPPO CR Rel-16 38.331 16.0.0 1612 - B TEI16

Dynamic LCP mapping restrictions – not yet agreed

Included in email [035], for delta comments only

Treat on-line

[R2-2004511](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004511.zip) Offline 053 on LCP Mapping Restrictions Nokia (Rapporteur) discussion Rel-16 TEI16 R2-2004114

P2

- LG think that there is a need for CA duplication and that the oppo proposal has significant support. QC agrees and think issues should be discussed separately. Oppos proposal has been discussed a number of times and suggest to not rediscuss. Nokias proposal seesm to not resolve the issue of TCP. Oppo agrees with the comments from LG and QC.

- Samsung think we don’t have consensus for any solution and that the proposals don’t resolve the issues in any case.

- Ericsson suggest to look at the CRs.

- Nokia think the discussion should be on the issues.

- For TCP slow start Nokia think the comments are not valid.

- Chair: It seems this canot be agreed, it seems longer discussions are needed to build consensus. However there is also significant support.

* Not pursued in R16

[R2-2005663](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005663.zip) Consideration on LCP mapping restrictions LG Electronics Inc. discussion Rel-16 TEI16

[R2-2004512](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004512.zip) Dynamic LCP Mapping Restrictions Nokia, Deutsche Telekom, Ericsson, Fujitsu, Nokia Shanghai Bell, NTT DOCOMO INC., T-Mobile CR Rel-16 38.300 16.1.0 0226 - B TEI16

[R2-2004514](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004514.zip) Dynamic LCP Mapping Restrictions Nokia, Deutsche Telekom, Ericsson, Fujitsu, Nokia Shanghai Bell, NTT DOCOMO INC., T-Mobile CR Rel-16 38.321 16.0.0 0740 - B TEI16

[R2-2004515](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004515.zip) Dynamic LCP Mapping Restrictions Nokia, Deutsche Telekom, Ericsson, Fujitsu, Nokia Shanghai Bell, NTT DOCOMO INC., T-Mobile CR Rel-16 38.331 16.0.0 1610 - B TEI16

[R2-2004519](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004519.zip) Dynamic LCP Mapping Restrictions Nokia, Deutsche Telekom, Ericsson, Fujitsu, Nokia Shanghai Bell, NTT DOCOMO INC., T-Mobile CR Rel-16 38.306 16.0.0 0309 - B TEI16

[R2-2004556](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004556.zip) Cell restriction mask for logical channel OPPO CR Rel-16 38.321 16.0.0 0742 - B TEI16

[R2-2004557](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004557.zip) Cell restriction mask for logical channel OPPO CR Rel-16 38.331 16.0.0 1613 - B TEI16

DISCUSSION

- Apple and Samsung don’t want to agree this.

- Huawei support.

* Not pursued in R16

Withdrawn:

R2-2004513 Dynamic LCP Mapping Restrictions Nokia, Nokia Shanghai Bell CR Rel-16 38.306 16.0.0 0308 - B TEI16 R2-2002741

#### 6.20.2.2 New proposals

Proposals with significant support

Treated by email [035]

[R2-2004863](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004863.zip) CR on PDCP security issue about duplicate detection Samsung, LG Electronics Inc., Nokia, Nokia Shanghai Bell, LG Uplus, Deutsche Telekom, NTT DOCOMO, Intel, Huawei, HiSilicon CR Rel-16 38.323 16.0.0 0032 6 F TEI16 R2-2003825

- [035] Chair: Detailed discussion. There is wide support for the proposal in R2-2004863 (where the text is somewhat vague and intended as a guideline to the implementer). NOTE that in the discussion it was considered by several companies that a sensible UE implementation would already be implemented according to this proposal. In [035] Futurewei proposed an alternative text proposal with more specific text which they claim better prevents bad implementations in explicitly covering additional cases, but it seems there is no consensus on the additional benefits, and many companies question how it works.

* [035] Agreed

[R2-2005662](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005662.zip) Retransmission of an RLC SDU with a poll after discard procedure LG Electronics Inc., Ericsson, NTT Docomo, LG Uplus, Sharp discussion Rel-16 TEI16 R2-2002998

* [035] Not pursued

[R2-2004601](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004601.zip) CFRA resource handling for BFR upon TAT expiry Nokia, Nokia Shanghai Bell, Apple, ASUSTek discussion Rel-16 TEI16

* [035] Not Pursued

DISCUSSION on alternative proposal raised in [035] to use the R16 TAC MAC CE specified for 2-step RACH for BFR.

* [035] R16 TAC MAC CE specified for 2-step RACH is not used for BFR

Proposals with less than 4 supporters

Not Treated

[R2-2004893](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004893.zip) SR\_COUNTER initialization due to RRC reconfiguration Fujitsu, LG Electronics Inc. discussion Rel-16 TEI16 R2-2002958

[R2-2005143](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005143.zip) RNTI ambiguity for CFRA and CBRA of 4-Step RACH Sony discussion Rel-16 TEI16 R2-2002667

[R2-2005473](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005473.zip) Stopping ra-ResponseWindow for contention-free BFR Huawei, HiSilicon, China Unicom discussion Rel-16 TEI16

[R2-2005510](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005510.zip) ON Duration adaptation LG Electronics Inc., LG Uplus, Vivo discussion Rel-16 TEI16

[R2-2004516](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004516.zip) Multiple Scheduling Requests Nokia, Nokia Shanghai Bell discussion Rel-16 TEI16

[R2-2005514](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005514.zip) Adaptation of QoS Flow to DRB Mapping for MDBV Enforcement Futurewei discussion Rel-16 TEI16

[R2-2005706](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005706.zip) Issue on ping pong state transition for sidelink UE Beijing Xiaomi Software Tech discussion

#### 6.20.2.3 Corrections

Corrections to functionality previously introduced as TEI16

### 6.20.3 TEI16 enhancements led by other WGs

Documents submitted to this agenda item will only be treated after a decision on the TEI has been made by another group and an LS informing RAN2 of their decision has been received. Tdoc limitation does not apply.

#### 6.20.3.0 In-principle Agreed CRs

#### 6.20.3.1 Open / ongoing proposals

#### 6.20.3.2 Corrections

Corrections to functionality previously introduced as TEI16

## 6.21 On demand SI in connected

On demand SI reception in RRC\_CONNECTED is relevant to several Rel-16 WIs (e.g. V2X, positioning). This agenda item is for the discussion of the generic procedure for on demand SI in RRC\_CONNECTED; WI specific details of the SI content should be discussed within the appropriate AI for that WI.

Tdoc Limitation: 1 tdoc

[R2-2005174](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005174.zip) [E243, E244] ASN.1 remaining issues on on-demand SIBs in CONNECTED Ericsson draftCR Rel-16 38.331 16.0.0 B 5G\_V2X\_NRSL-Core, NR\_pos-Core Late

[R2-2004530](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004530.zip) Corrections for onDemandSIB-RequestProhibitTimer operation Samsung Electronics Co., Ltd discussion Rel-16

[R2-2004604](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004604.zip) Open issues on Prohibit timer Lenovo, Motorola Mobility discussion Rel-16 TEI16

[R2-2004641](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004641.zip) Remaining issues of on-demand SI in RRC\_CONNECTED vivo discussion Rel-16 TEI16

[R2-2004706](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004706.zip) On-demand request for SIB9 (for reasons beyond IIoT) [M118] MediaTek Inc. discussion Rel-16

[R2-2004795](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004795.zip) [C701]Prohibit Timer for on Demand SIB Request in RRC\_CONNECTED CATT discussion Rel-16 NR\_pos-Core, 5G\_V2X\_NRSL-Core Late

[R2-2004986](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004986.zip) [H780] Text Proposal on PDCCH monitoring for SI request in RRC\_CONNECTED Huawei, HiSilicon discussion Rel-16 NR\_pos-Core Late

[R2-2004987](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004987.zip) [H781-783] Correction on OnDemandSIB-Request Huawei, HiSilicon draftCR Rel-16 38.331 16.0.0 NR\_pos-Core Late

[R2-2005102](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005102.zip) Discussion on the remaining issue of on-demand SI in RRC\_CONNECTED Huawei, HiSilicon discussion Rel-16 NR\_pos-Core

[R2-2005597](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005597.zip) [Z113] [Z117] Text proposal for accepted RIL issues ZTE Corporation, Sanechips discussion Rel-16

[R2-2005696](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005696.zip) Condition for T350 stop LG Electronics Inc. discussion

[R2-2005172](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005172.zip) Introduction of on-demand SIB(s) procedure in CONNECTED Ericsson (Rapporteur) CR Rel-16 38.331 16.0.0 1657 - B 5G\_V2X\_NRSL-Core, NR\_pos-Core

[R2-2005173](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005173.zip) Introduction of on-demand SIB(s) procedure in CONNECTED Ericsson (Rapporteur) CR Rel-16 38.300 16.1.0 0237 - B 5G\_V2X\_NRSL-Core, NR\_pos-Core

## 6.22 Physical layer enhancements for NR ultra-reliable and low latency case (URLLC)

(NR\_L1enh\_URLLC-Core; leading WG: RAN1; REL-16; target; June 20; WID: RP-191584; SR: RP-200090). UL intra-UE prioritization and enhanced UL CG transmission is addressed under RAN2 IIOT WI (do not submit under this AI).

Time budget: 1 TU

Tdoc Limitation: 2 tdocs

### 6.22.1 Organizational

[R2-2005476](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005476.zip) Introduction of NR eURLLC capabilities Huawei, HiSilicon draftCR Rel-16 38.306 16.0.0 B NR\_L1enh\_URLLC-Core

=> Revised in R2-2006052

R2-2006052 Introduction of NR eURLLC capabilities Huawei, HiSilicon draftCR Rel-16 38.306 16.0.0 B NR\_L1enh\_URLLC-Core

* [038] Endorsed (to be merged w main UECAP 38306 CR)

[R2-2005477](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005477.zip) Introduction of NR eURLLC capabilities Huawei, HiSilicon draftCR Rel-16 38.331 16.0.0 B NR\_L1enh\_URLLC-Core

=> Revised in R2-2006053

R2-2006053 Introduction of NR eURLLC capabilities Huawei, HiSilicon draftCR Rel-16 38.331 16.0.0 B NR\_L1enh\_URLLC-Core

* [038] Endorsed (to be merged w main UECAP 38331 CR)
* [AT110-e][038][eURLLC] UE capabilities CRs (Huawei)

Intended outcome: Endorsed Draft CRs 38306 38331 implementing R2 capabilites (with high quality cover sheet, changemarks author = WI code)

Deadline: June 7th, 0700 UTC

CLOSED

### 6.22.2 RRC Open Issues and Corrections

CR was endorsed last meeting. Corrections, Class 3 RIL issues. For accepted RIL issues, the proponent company may provide a discussion doc with annex TP (if needed) that do not count towards the tdoc limitation. Contributions should be reserved for more complicated issued and minor issues are expected to be resolved in RRC email discussions or by CR rapporteur without any tdoc.

[R2-2005342](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005342.zip) [H603] How to support UL CI for UL Transmission OPPO discussion Rel-16 NR\_L1enh\_URLLC-Core

[R2-2005478](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005478.zip) [H600]-[H603] Capturing the updated L1 parameters from RAN1#100bis-e Huawei, HiSilicon discussion Rel-16 NR\_L1enh\_URLLC-Core

[R2-2005479](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005479.zip) [H604] [H605] [H609] Clean-up of the remaining Editor's notes for L1 parameters Huawei, HiSilicon discussion Rel-16 NR\_L1enh\_URLLC-Core

R2-2006054 Summary of [AT110e][039][eURLLC] RRC (Huawei) Huawei discussion Rel-16 NR\_L1enh\_URLLC-Core

* [039] All tdocs grouped above are Noted
* [AT110-e][039][eURLLC] RRC (Huawei)

Scope: Treat All Relevant Review Issues (RIL) and tdocs under 6.22.2

Intended outcome: Agreed 38331 CR Building on the baseline

Deadline: June 11, 0700 UTC

CR

[R2-2005475](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005475.zip) Correction to RRC spec for eURLLC Huawei, HiSilicon CR Rel-16 38.331 16.0.0 1588 2 F NR\_L1enh\_URLLC-Core R2-2004285

=> Revised in R2-2006055

R2-2006055 Correction to RRC spec for eURLLC Huawei, HiSilicon CR Rel-16 38.331 16.0.0 1588 3 F NR\_L1enh\_URLLC-Core

- [039] The CR is agreeable

- [039] Rap: there are two L1 parameter that need to be added.

* [Post110-e][039][eURLLC] RRC (Huawei)

Scope: Add L1 parameters

Intended outcome: Agreed 38331 CR

Deadline: Short

### 6.22.3 MAC Open issues and corrections

CR was endorsed last meeting

[R2-2005474](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005474.zip) Correction to MAC spec for eURLLC Huawei, HiSilicon CR Rel-16 38.321 16.0.0 0734 1 F NR\_L1enh\_URLLC-Core R2-2004148

=> Revised in R2-2006056

R2-2006056 Correction to MAC spec for eURLLC Huawei, HiSilicon CR Rel-16 38.321 16.0.0 0734 2 F NR\_L1enh\_URLLC-Core

* [040] Agreed
* [AT110-e][040][eURLLC] MAC (Huawei)

Scope: TBD if R2-2004965 is in scope (it will be treated with IIOT).

Intended outcome: Agreed 38321 CR Building on the baseline

Deadline: June 11, 0700 UTC

# 7 Rel-16 LTE Work Items

Documents in these agenda items will be handled in break out sessions

## 7.0 LTE Rel-16 General

### 7.0.1 ASN.1 review

Including documents related to LTE ASN.1 review.

Including outcome of [Post109bis-e][932][LTE/NR/ASN.1] Resolution to review issues S003, S005, B002, S046 (Samsung/Ericsson)

A web conference may be used for handling some of the discussions in this agenda item.

[R2-2004626](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004626.zip) [Q502] [Z302] Merging issues in TS 36.331 subclause 5.3.3.4a Qualcomm Incorporated discussion

[R2-2005178](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005178.zip) [Post109bis-e][932][LTE-NR-ASN.1] Correction on crossRAT signalling for NR V2X Ericsson CR Rel-16 38.331 16.0.0 1658 - F 5G\_V2X\_NRSL-Core Late

[R2-2005281](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005281.zip) General ASN.1 issues for 36.331 Rel-16 (S004, S006, B102, Q604, B103, X002) Samsung Telecommunications discussion Rel-16 TEI16 R2-2003231 Late

=> Revised in [R2-2005996](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005996.zip)

[R2-2005996](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005996.zip) General ASN.1 issues for 36.331 Rel-16 (S004, S006, B102, Q604, B103, X002) Samsung Telecommunications discussion Rel-16 TEI16 Late

[R2-2005282](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005282.zip) TP for general ASN.1 issues for 36.331 REL-16 (General ASN.1 issues for 36.331 Rel-16 (S004, S006, B102, Q604, B103, X002) Samsung Telecommunications draftCR Rel-16 36.331 16.0.0 TEI16 Late

R2-2005284 ASN.1 Review file (LTE, Word) Samsung Telecommunications draftCR Rel-16 36.331 16.0.0 TEI16 R2-2003234 Late

R2-2005285 ASN.1 Review RIL (LTE, Excel) Samsung Telecommunications report Rel-16 TEI16 R2-2003827 Late

[R2-2005286](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005286.zip) LTE Rel-16 ASN.1 Review, Class 0 and Class 1 issues Samsung Telecommunications report Rel-16 TEI16 R2-2003235 Late

[R2-2005287](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005287.zip) General changes resulting from ASN.1 review for LTE RRC REL-16 Samsung Telecommunications CR Rel-16 36.331 16.0.0 4315 - F TEI16 Late

[R2-2005288](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005288.zip) Report of [Post109bis-e][932][LTE/NR/ASN.1] Resolution of review issues S003, S005, B002, S046 (Samsung/Ericsson)) Samsung Telecommunications report Rel-16 5G\_V2X\_NRSL-Core Late

[R2-2005289](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005289.zip) V2X IRAT signalling (resolution of S003, S005, B002, S046) Samsung Telecommunications draftCR Rel-16 36.331 16.0.0 5G\_V2X\_NRSL-Core Late

[R2-2005290](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005290.zip) Encoding of 5G indicator (S191) Samsung Telecommunications draftCR Rel-16 36.331 16.0.0 TEI16

draftCR Rel-16 36.331 16.0.0 TEI16 Late

### 7.0.2 Features and UE capabilities

Including documents related to LTE UE capabilities based on RAN1/4 input. WI-specific capability contributions should be submitted to the individual WI agenda items.

A web conference may be used for handling some of the discussions in this agenda item.

[R2-2004357](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004357.zip) LS on updated Rel-16 RAN1 UE features lists for LTE (R1-2003070;; contact: NTT DOCOMO, AT&T) RAN1 LS in Rel-16 LTE\_eMTC5-Core, NB\_IOTenh3-Core, LTE\_DL\_MIMO\_EE-Core, LTE\_terr\_bcast-Core, 5G\_V2X\_NRSL-Core, TEI16 To:RAN2 Cc:RAN4

R2-2006089 LS on categories for terrestrial broadcast (R1-2004912; contact: Qualcomm) RAN1 LS in Rel-16 LTE\_terr\_bcast-Core To:RAN2 Cc:RAN4

R2-2006096 LS on updated Rel-16 RAN1 UE features lists for LTE (R1-2004967; contact: NTT DOCOMO, AT&T) RAN1 LS in Rel-16 LTE\_eMTC5-Core, NB\_IOTenh3-Core, LTE\_DL\_MIMO\_EE-Core, LTE\_terr\_bcast-Core, 5G\_V2X\_NRSL-Core, TEI-16 To:RAN2 Cc:RAN4

## 7.1 Additional MTC enhancements for LTE

(LTE\_eMTC5-Core; leading WG: RAN1; REL-16; started: Jun 18; target; June 20; WID: RP-191356; SR: RP-200309)

Time budget: 2.5 TU

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

Some sub-items in 7.1 and 7.2 may be treated jointly.

### 7.1.1 Organisational

Including incoming LSs, rapporteur inputs, running CRs.

A web conference may be used for handling some of the discussions in this AI.

One CR per specification will be provided by the corresponding rapporteur. No individual company CRs are expected. Companies should provide TPs when needed.

[R2-2004323](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004323.zip) LS on SA WG2 status of MT-EDT in Rel-16 (S2-2003505; contact: Qualcomm) SA2 LS in Rel-16 5G\_CIoT To:SA, RAN2, RAN3, CT1, SA3

[R2-2004628](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004628.zip) Corrections to MAC for Rel-16 eMTC Ericsson CR Rel-16 36.321 16.0.0 1473 1 F NB\_IOTenh3-Core, LTE\_eMTC5-Core R2-2003922

[R2-2004658](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004658.zip) Miscellaneous corrections to Rel-16 eMTC enhancements Intel Corporation CR Rel-16 36.300 16.1.0 1281 1 F LTE\_eMTC5-Core R2-2003918

[R2-2004918](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004918.zip) Corrections to WUS group for eMTC Nokia CR Rel-16 36.304 16.0.0 0789 1 F LTE\_eMTC5-Core R2-2003920

[R2-2005205](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005205.zip) Miscellaneous Rel-16 eMTC corrections Qualcomm Incorporated CR Rel-16 36.331 16.0.0 4239 2 F LTE\_eMTC5-Core R2-2003923 Late

### 7.1.2 Stand-alone deployment

Including the outcome of [Post109bis-e][945][eMTC] Standalone deployment – Remaining issues (Ericsson). This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting (decision to be made based on the submitted tdocs). A web conference will be used for handling the discussions in this AI.

[R2-2004629](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004629.zip) Report on Standalone email discussion Ericsson report LTE\_eMTC5-Core Late

### 7.1.3 Mobility Enhancements

This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting (decision to be made based on the submitted tdocs). A web conference will be used for handling the discussions in this AI.

[R2-2005038](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005038.zip) RSS configuration for UEs in RRC\_CONNECTED ZTE Corporation, Sanechips discussion Rel-16 LTE\_eMTC5-Core

[R2-2005306](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005306.zip) Text Proposal RSS for RSRP Ericsson discussion Rel-16

[R2-2005307](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005307.zip) Text Proposal RSS Configurations for narrowBandIndex and timeoffsetgranularity Ericsson, Sony response Rel-16

### 7.1.4 Connection to 5GC

Connection to 5GC for MTC and NB-IoT is treated jointly under this AI. This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting (decision to be made based on the submitted tdocs). A web conference of an offline discussion will be used for handling the discussions in this AI.

[R2-2004630](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004630.zip) Enabling R16 AS RAI for 5GC Ericsson discussion NB\_IOTenh3-Core, LTE\_eMTC5-Core Revised

[R2-2004841](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004841.zip) Early UE capability retrieval enhancements for eMTC/5GC Qualcomm India Pvt Ltd discussion Rel-16 LTE\_eMTC5-Core R2-2002610

[R2-2004862](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004862.zip) Idle Mode cell reselection based on CN type supported Qualcomm Incorporated, TurkCell, Sony discussion Rel-16 LTE\_eMTC5-Core, NB\_IOTenh3-Core R2-2002609

[R2-2005024](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005024.zip) UP data protection for UP CIoT 5GS Opmitisation Huawei, HiSilicon discussion Rel-16 NB\_IOTenh3-Core, LTE\_eMTC5-Core

[R2-2005150](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005150.zip) Mobility enhancements for Connectivity to 5GC for MTC and NB-IoT Sony, Qualcomm discussion Rel-16 NB\_IOTenh3-Core

[R2-2005323](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005323.zip) AS RAI and optimization of release Ericsson, LG Electronics Inc., Sony, Sierra Wireless, Thales, Lenovo, Motorola Mobility, MediaTek Inc., Turkcell discussion Rel-16 LTE\_eMTC5-Core, NB\_IOTenh3-Core R2-2003428

[R2-2005324](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005324.zip) LS on AS RAI and optimization of release Ericsson LS out Rel-16 LTE\_eMTC5-Core, NB\_IOTenh3-Core R2-2003430 To:SA2 Cc:RAN3

R2-2005675 Enabling R16 AS RAI for 5GC Ericsson discussion LTE\_eMTC5-Core, NB\_IOTenh3-Core [R2-2004630](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004630.zip) Late

### 7.1.5 UE capabilities – MTC

This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting (decision to be made based on the submitted tdocs). A web conference will be used for handling the discussions in this AI.

[R2-2005080](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005080.zip) Update to UE capabilities for eMTC Huawei, HiSilicon CR Rel-16 36.306 16.0.0 1752 2 F LTE\_eMTC5-Core R2-2003921

[R2-2005085](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005085.zip) RAN1 feature list and UE capabilities issues for eMTC Huawei, HiSilicon discussion Rel-16 LTE\_eMTC5-Core

### 7.1.6 ASN.1 review – MTC

Including documents related to class 2/3 ASN.1 review issues that require WI-specific discussion. A web conference will be used for handling the discussions in this AI.

### 7.1.7 Other

Including documents related to MT early data transmission EDT, Scheduling multiple DL/UL transport blocks, Quality report in Msg3, MPDCCH performance improvement using CRS, Improvements for non-BL UEs, Co-existence with NR, and MTC specific issues.

This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting. A web conference may be used for handling some of the discussions in this AI.

## 7.2 Additional enhancements for NB-IoT

(NB\_IOTenh3-Core; leading WG: RAN1; REL-16; started: Jun 18; target; June 20; WID: RP-200293; SR: RP-200440)

Time budget: 2.5 TU

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

Some sub-items in 7.1 and 7.2 may be treated jointly.

### 7.2.1 Organisational

Including incoming LSs, draft TS, rapporteur inputs, etc

A web conference will be used for handling some of the discussions in this AI.

One CR per specification will be provided by the corresponding rapporteur. No individual company CRs are expected. Companies should provide TPs when needed.

[R2-2004322](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004322.zip) Reply LS on MO exception data (S2-2003504; contact: Qualcomm) SA2 LS in Rel-16 5G\_CIoT To:CT4 Cc:RAN2, CT1

[R2-2004342](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004342.zip) Reply LS on open PUR issues for NB-IoT/eMTC (R1-2002846; contact: Intel) RAN1 LS in Rel-16 NB\_IOTenh3-Core, LTE\_eMTC5-Core To:RAN2

[R2-2004345](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004345.zip) LS on PUR working assumption for NB-IoT and eMTC (R1-2002944; contact: Huawei) RAN1 LS in Rel-16 NB\_IOTenh3-Core, LTE\_eMTC5-Core To:RAN2

[R2-2004466](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004466.zip) RAN2 agreements for Rel-16 additional enhancements for NB-IoT and MTC Rapporteur (BlackBerry) other Rel-16 LTE\_eMTC5-Core, NB\_IOTenh3-Core

[R2-2004631](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004631.zip) Corrections to MAC for Rel-16 NB-IoT Ericsson CR Rel-16 36.321 16.0.0 1472 1 F NB\_IOTenh3-Core, LTE\_eMTC5-Core R2-2004043

[R2-2004930](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004930.zip) Introduction of Rel-16 NB-IoT enhancements Nokia CR Rel-16 36.304 16.0.0 0788 2 B NB\_IOTenh3-Core R2-2004042

[R2-2005028](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005028.zip) Miscellaneous corrections to TS 36.300 for Rel-16 NB-IoT Huawei, HiSilicon CR Rel-16 36.300 16.1.0 1277 2 F NB\_IOTenh3-Core R2-2004039

[R2-2005029](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005029.zip) Miscellaneous corrections to 36.331 for Rel-16 NB-IoT Huawei, HiSilicon CR Rel-16 36.331 16.0.0 4287 2 F NB\_IOTenh3-Core, LTE\_eMTC5-Core R2-2004040

### 7.2.2 UE-group wake-up signal (WUS)

UE group wake Up signal for MTC and NB-IoT is treated jointly under this Agenda Item.

This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting.

A web conference will be used for handling some of the discussions in this AI.

[R2-2005129](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005129.zip) Group WUS for mobile UE Lenovo, Motorola Mobility discussion Rel-16

[R2-2005146](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005146.zip) On supporting UE group WUS operation with mobility Sony, Ericsson discussion Rel-16 NB\_IOTenh3-Core R2-2002671

[R2-2005204](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005204.zip) Group WUS corrections Qualcomm Incorporated discussion Rel-16 LTE\_eMTC5-Core, NB\_IOTenh3-Core

[R2-2005278](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005278.zip) GWUS Resource location signalling for eMTC Nokia Solutions & Networks (I) discussion Rel-16 NB\_IOTenh3

[R2-2005624](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005624.zip) TP for 36.331 changes for GWUS Config Nokia Solutions & Networks (I) discussion Rel-16

[R2-2006009](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006009.zip) Summary of WUS contributions Qualcomm Incorporated discussion Rel-16 LTE\_eMTC5-Core, NB\_IOTenh3-Core

### 7.2.3 Transmission in preconfigured resources

Transmission in preconfigured resources for MTC and NB-IoT is treated jointly under this Agenda Item.

This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting.

A web conference will be used for handling some of the discussions in this AI.

[R2-2004632](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004632.zip) [E906, E907] Remaining open issues in PUR Ericsson discussion NB\_IOTenh3-Core, LTE\_eMTC5-Core

[R2-2004633](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004633.zip) Draft LS reply on PUR open issues and working assumption Ericsson LS out NB\_IOTenh3-Core, LTE\_eMTC5-Core To:RAN1

[R2-2004817](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004817.zip) Remaining issue on NB-IoT Preconfigured resources ITL discussion Rel-16

[R2-2005019](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005019.zip) Discussion on start offset and requested TBS for PUR Huawei, HiSilicon discussion Rel-16 NB\_IOTenh3-Core, LTE\_eMTC5-Core

[R2-2005020](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005020.zip) RRC-MAC interactions for PUR Huawei, HiSilicon discussion Rel-16 NB\_IOTenh3-Core, LTE\_eMTC5-Core

[R2-2005021](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005021.zip) Discussion on RAN1 LSs for PUR Huawei, HiSilicon discussion Rel-16 NB\_IOTenh3-Core, LTE\_eMTC5-Core

[R2-2005022](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005022.zip) [Draft] Reply LS on PUR working assumption for NB-IoT and eMTC Huawei LS out Rel-16 NB\_IOTenh3-Core, LTE\_eMTC5-Core To:RAN1

[R2-2005023](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005023.zip) [Draft] Reply LS on open PUR issues for NB-IoT and eMTC Huawei LS out Rel-16 NB\_IOTenh3-Core, LTE\_eMTC5-Core To:RAN1

[R2-2005035](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005035.zip) Remaining FFSs for PUR ZTE Corporation, Sanechips discussion Rel-16 LTE\_eMTC5-Core, NB\_IOTenh3-Core

[R2-2005206](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005206.zip) [H810] [H840] [H854] PUR start time offset Qualcomm Incorporated discussion Rel-16 LTE\_eMTC5-Core, NB\_IOTenh3-Core

[R2-2005569](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005569.zip) Remaining issue of D-PUR TA timer in RRC ASUSTeK discussion Rel-16 NB\_IOTenh3-Core

[R2-2005570](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005570.zip) PUR configuration maintenance during RRC state transition ASUSTeK discussion Rel-16 36.331 NB\_IOTenh3-Core

[R2-2005571](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005571.zip) HARQ feedback in RRC\_IDLE ASUSTeK discussion Rel-16 36.321 NB\_IOTenh3-Core

[R2-2005726](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005726.zip) Summary for 7.2.3 Preconfigured uplink resources Ericsson discussion Rel-16 NB\_IOTenh3-Core

### 7.2.4 NB-IoT Specific

NB-IoT specific topics

This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting.

A web conference will be used for handling some of the discussions in this AI.

Includes [Post109bis-e][944][NBIOT] CSS overlapping case for UE specific DRX (Sequans)

[R2-2005037](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005037.zip) Necessity of time stamp info for ANR in NB-IoT ZTE Corporation, Sanechips discussion Rel-16 NB\_IOTenh3-Core

[R2-2005686](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005686.zip) Report of [Post109bis-e][944][NBIOT] CSS overlapping case for UE specific DRX Sequans Communications discussion NB\_IOTenh3-Core

=> Revised in [R2-2006005](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006005.zip)

[R2-2006005](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2006005.zip) Report of [Post109bis-e][944][NBIOT] CSS overlapping case for UE specific DRX Sequans Communications discussion NB\_IOTenh3-Core

### 7.2.5 NB-IoT UE capabilities

This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting.

A web conference will be used for handling some of the discussions in this AI.

[R2-2004467](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004467.zip) Updates for Rel-16 additional enhancements NB-IoT BlackBerry UK Limited CR Rel-16 36.306 16.0.0 1746 2 F NB\_IOTenh3-Core R2-2004044

[R2-2005030](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005030.zip) RAN1 features list and UE capabilities issues Huawei, HiSilicon discussion Rel-16 NB\_IOTenh3-Core, LTE\_eMTC5-Core

### 7.2.6 ASN.1 review of NB-IoT

Including documents related to Class 2/3 ASN.1 review issues that require WI-specific discussion.

A web conference will be used for handling some of the discussions in this AI.

[R2-2005031](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005031.zip) [H812][H842] Signalling of newUEidentity for PUR Huawei, HiSilicon discussion Rel-16 NB\_IOTenh3-Core, LTE\_eMTC5-Core

[R2-2005032](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005032.zip) [H813][H843] Description of groupForServiceList for GWUS Huawei, HiSilicon discussion Rel-16 NB\_IOTenh3-Core, LTE\_eMTC5-Core

[R2-2005033](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005033.zip) [H816] GWUS frequency location and resource pattern Huawei, HiSilicon discussion Rel-16 LTE\_eMTC5-Core

[R2-2005034](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005034.zip) [H844, H847, H845, H846, H853 ] Miscellaneous RIL WI open issues Huawei, HiSilicon discussion Rel-16 NB\_IOTenh3-Core

## 7.3 Even further mobility enhancement in E-UTRAN

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

No documents should be submitted to 7.3. Documents under 7.3 will be treated together with documents in 6.9.

A web conference may be used for handling some of the discussions in this WI, and summary document may be provided for some agenda items under 7.3.

### 7.3.1 Organizational

Including incoming LSs and rapporteur inputs (if any).

Including outcome of [Post109bis-e][928][LTE MOB] Stage-2 CR (China Telecom)

[R2-2005214](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005214.zip) Corrections to even further mobility enhancement in E-UTRAN China Telecommunications CR Rel-16 36.300 16.1.0 1284 - F LTE\_feMob-Core

### 7.3.2 Reduction in user data interruption during DAPS handover

This AI jointly addresses corrections to NR and LTE DAPS.

Including corrections to control and user plane for DAPS HO. All RRC-related corrections to DAPS should be submitted to ASN.1 review agenda items in 6.9.5 (NR RRC) and 7.3.4 (LTE RRC).

Tdoc Limitation per company: 2 tdocs

[R2-2004563](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004563.zip) ROHC Handling for DAPS Handover without Key Change MediaTek Inc. discussion

[R2-2004644](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004644.zip) CR on 36.321 for LTE feMob vivo CR Rel-16 36.321 16.0.0 1474 - B LTE\_feMob-Core

[R2-2004645](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004645.zip) CR on 38.321 for NR mobility enhancement vivo CR Rel-16 38.321 16.0.0 0744 - B NR\_Mob\_enh-Core

[R2-2004648](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004648.zip) Handling of the source SRB at DAPS failure vivo discussion Rel-16 LTE\_feMob-Core

[R2-2004649](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004649.zip) Disabling multi-leg RB for DAPS vivo discussion Rel-16 LTE\_feMob-Core

[R2-2004697](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004697.zip) RoHC feedback to source cell after UL transmission switch Ericsson discussion Rel-16 LTE\_feMob-Core

[R2-2004699](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004699.zip) Open issues for control plane aspects of DAPS handover Ericsson discussion Rel-16 LTE\_feMob-Core

[R2-2004787](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004787.zip) Handling of expiry of DataInactivityTimer for DAPS NEC discussion Rel-16 LTE\_feMob-Core

[R2-2004788](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004788.zip) Solutions for security issue in case of DAPS without key change NEC discussion Rel-16 LTE\_feMob-Core

[R2-2004878](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004878.zip) Compromised solutions for ROHC related security issue Samsung discussion LTE\_feMob-Core

[R2-2004896](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004896.zip) Discussion on old stored RRC message handling upon DAPS HO failure OPPO discussion Rel-16 NR\_Mob\_enh-Core

[R2-2004916](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004916.zip) Discussion on ROHC handling in DAPS HO OPPO discussion Rel-16 LTE\_feMob-Core

[R2-2004947](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004947.zip) DAPS handover UP remaining key issues Qualcomm India Pvt Ltd discussion Rel-16 NR\_Mob\_enh-Core, LTE\_feMob-Core

[R2-2005057](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005057.zip) Discussion on transmitting ROHC IR packets in target during DAPS HO Huawei, HiSilicon, Vivo, Oppo, Apple, China Telecom, Samsung, LG Electronics, CATT, CMCC, Mediatek Inc., LG Uplus discussion Rel-16 LTE\_feMob-Core

[R2-2005058](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005058.zip) CR on 38.323 for NR mobility enhancement Huawei, HiSilicon, Mediatek Inc., LG Electronics CR Rel-16 38.323 16.0.0 0045 2 C LTE\_feMob-Core R2-2003853

[R2-2005059](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005059.zip) CR on 36.323 for LTE feMob Huawei, HiSilicon, Mediatek Inc., LG Electronics CR Rel-16 36.323 16.0.0 0282 2 C LTE\_feMob-Core R2-2003854

[R2-2005060](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005060.zip) Discussion on DAPS CP remaining issue Huawei, HiSilicon discussion Rel-16 LTE\_feMob-Core

[R2-2005161](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005161.zip) Target cell’s ROHC behaviour for DAPS handover Nokia, Nokia Shanghai Bell, Ericsson, Intel Corporation, NEC discussion Rel-16 LTE\_feMob-Core

[R2-2005349](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005349.zip) Clarification on not supporting CHO+DAPS ZTE Corporation, Sanechips discussion Rel-16 LTE\_feMob-Core

[R2-2005448](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005448.zip) Discussion of remaining issues for DAPS HO CMCC discussion Rel-16 LTE\_feMob-Core

[R2-2005497](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005497.zip) Handling of RLC for SRBs LG Electronics Inc. discussion NR\_Mob\_enh-Core, LTE\_feMob-Core

[R2-2005500](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005500.zip) ROHC handling for DAPS HO without security key change LG Electronics Inc. discussion NR\_Mob\_enh-Core, LTE\_feMob-Core

[R2-2005513](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005513.zip) Remaining issues on fallback from DAPS handover failure SHARP Corporation discussion Rel-16 LTE\_feMob-Core

### 7.3.3 UE capabilities for conditional handover and DAPS

Including UE capability aspects of LTE mobility WI. Any input on UE capabilities from RAN1/4 will be handled in this agenda item.

Including outcome of [Post109bis-e][931][LTE MOB] UE capabilities for NR mobility (China Telecom)

Tdoc Limitation per company: 1 tdoc.

[R2-2004691](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004691.zip) Open issues on UE capabilities at DAPS HO Ericsson discussion Rel-16 LTE\_feMob-Core

R2-2005216 report of [Post109bis-e][931][LTE MOB] UE capabilities for NR mobility (China Telecom) China Telecommunications discussion Late

[R2-2005217](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005217.zip) UE Capability for Rel-16 LTE even further mobility enhancement China Telecommunications CR Rel-16 36.331 16.0.0 4306 - B LTE\_feMob-Core

[R2-2005218](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005218.zip) UE Capability for Rel-16 LTE even further mobility enhancement China Telecommunications CR Rel-16 36.306 16.0.0 1763 - B LTE\_feMob-Core

[R2-2005685](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005685.zip) Consideration on DAPS Capability LG Electronics Inc. discussion Rel-16 NR\_Mob\_enh-Core, LTE\_feMob-Core R2-2002905

### 7.3.4 ASN.1 review of mobility WIs for LTE RRC

This agenda item focuses on LTE RRC aspects of both LTE and NR mobility WIs – NR RRC aspects of both LTE and NR mobility WIs should be submitted to 6.9.5. Do not submit contributions on WI-specific open issues that are not captured in the current LTE RRC to this agenda item.

All ASN.1 issues should be raised in RILs first – contributions where no RIL issue exists may not be treated.

Including contributions/TPs on RRC corrections based on review issues. For these, no individual company CRs should be submitted: please consult with the rapporteur of LTE RRC CR first (cecilia.eklof@ericsson.com).

[R2-2004621](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004621.zip) Updates for R16 LTE Mobility Enhancements and LTE updates for R16 NR Mobility Enhancements Ericsson CR Rel-16 36.331 16.0.0 4290 1 F LTE\_feMob-Core R2-2003852

[R2-2004695](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004695.zip) [E928][I114] Condition for setting statusReportRequired for RLC UM Ericsson, Intel Corporation discussion LTE\_feMob-Core

[R2-2005063](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005063.zip) Discussion on UE capabilities for LTE DAPS Huawei, HiSilicon discussion Rel-16 LTE\_feMob-Core

[R2-2005350](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005350.zip) [Z263] Discussion on UE configuration release in RRC re-establishment ZTE Corporation, Sanechips discussion Rel-16 LTE\_feMob-Core

### 7.3.5 Other

Only corrections not fitting other agenda items.

Including CHO aspects that are LTE-specific without equivalent NR impacts: Do not use this AI for any item that can be discussed jointly for LTE and NR - Contributions on conditional handover that apply for both LTE and NR are treated jointly in under 6.9.3.

Tdoc Limitation per company: 1 tdoc.

[R2-2004692](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004692.zip) Power coordination at DAPS HO in LTE Ericsson discussion Rel-16 LTE\_feMob-Core

[R2-2005384](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005384.zip) Discussion on LTE specific CHO issues Huawei, HiSilicon discussion Rel-16 LTE\_feMob-Core

[R2-2005612](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005612.zip) Draft CR on 38.321 for NR mobility enhancement LG Electronics draftCR Rel-16 38.321 16.0.0 F NR\_Mob\_enh-Core

## 7.4 Further performance enhancement for LTE in high speed scenario

(LTE\_high\_speed\_enh2-Core; leading WG: RAN4; REL-16; started: Jun 18; target; Sep 19; WID: RP-181482)

Including documents related to WI-specific ASN.1 review issues.

A web conference may be used for handling some of the discussions in this agenda item.

## 7.5 Other LTE Rel-16 WIs

This agenda item is to be used for LSs and 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) or for which there is no allocated RAN2 time.

A web conference may be used for handling some of the discussions in this WI.

[R2-2004381](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004381.zip) LS on Reply on QoE Measurement Collection (S5-202304; contact: Ericsson) SA5 LS in Rel-16 QOED To:SA4, CT1, RAN2, RAN3

[R2-2004382](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004382.zip) LS on Reply on QoE Measurement Collection (S5-202305; contact: Ericsson) SA5 LS in Rel-16 QOED To:RAN2, RAN3 Cc:CT1, SA4

### 7.5.0 In-principle Agreed CRs

### 7.5.1 Other

[R2-2004623](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004623.zip) Handling of incoming LS on QoE Measurement Collection Ericsson discussion TEI16

[R2-2004624](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004624.zip) QoE Measurement Collection additions Ericsson CR Rel-16 36.331 16.0.0 4297 - C TEI16

[R2-2004625](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004625.zip) Draft LS Reply on QoE Measurement Collection Ericsson LS out Rel-16 TEI16 To:SA5 Cc: RAN3, SA4, CT1

## 7.6 LTE TEI16 enhancements

Small Technical Enhancements to LTE. TEI should be predominantly within a single WG and fully completed within the same quarter in all affected WGs. RAN2 impact of RAN1/4-led TEI shall be limited to RRC signalling of configuration parameters and UE capabilities (no MAC impact, no RRC procedural impact, etc). Please also see RP-191602 endorsed at RAN#84.

Including documents related to TEI16 ASN.1 review issues.

New TEI16 proposals are discouraged and may be deprioritized in this meeting.

A web conference may be used for handling some of the discussions in this agenda item.

### 7.6.0 In-principle Agreed CRs

[R2-2004818](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004818.zip) CR on RLC out-of-order delivery configuration Samsung, LG Electronics Inc., Nokia, Nokia Shanghai Bell, Intel, Apple CR Rel-15 36.323 15.5.0 0283 1 F TEI15, LTE\_HRLLC-Core R2-2003860

[R2-2004820](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004820.zip) CR on RLC out-of-order delivery configuration Samsung, LG Electronics Inc., Nokia, Nokia Shanghai Bell, Intel, Apple CR Rel-16 36.323 16.0.0 0284 1 A TEI16 R2-2003861

[R2-2004826](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004826.zip) CR on RLC out-of-order delivery configuration Samsung, LG Electronics Inc., Nokia, Nokia Shanghai Bell, Intel, Apple CR Rel-15 36.331 15.9.0 4288 1 F TEI15, LTE\_HRLLC-Core R2-2003862

[R2-2004827](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004827.zip) CR on RLC out-of-order delivery configuration Samsung, LG Electronics Inc., Nokia, Nokia Shanghai Bell, Intel, Apple CR Rel-16 36.331 16.0.0 4240 2 F TEI16 R2-2003863

### 7.6.1 Other

[R2-2005385](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005385.zip) Discussion on QMC regarding incoming SA5 LS Huawei, HiSilicon discussion Rel-16 LTE\_QMC\_Streaming-Core

[R2-2005386](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005386.zip) [Draft] reply LS to [R2-2004381](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004381.zip) Huawei LS out Rel-16 LTE\_QMC\_Streaming-Core To:SA5 Cc: RAN3, CT1, SA4

[R2-2005387](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005387.zip) [Draft] reply LS to [R2-2004382](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004382.zip) Huawei LS out Rel-16 LTE\_QMC\_Streaming-Core To:SA5 Cc: RAN3, CT1, SA4

## 7.7 Support of Indian Navigation Satellite System (NavIC)

(LCS\_NAVIC; leading WG: RAN2; REL-16; started: Sept 19; target; March-20; WID: RP-192350)

Time budget: 0 TU

This item is 100%

[R2-2004595](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004595.zip) Introduction of NavIC Keplerian set IE Reliance Jio CR Rel-16 37.355 16.0.0 0257 2 F LCS\_NAVIC-Core R2-2003998

## 7.8 DL MIMO efficiency enhancements for LTE

(LTE\_DL\_MIMO\_EE-Core; leading WG: RAN1; REL-16;target; March-20; WID: RP-182901)

Including documents related to WI-specific ASN.1 review issues.

A web conference may be used for handling some of the discussions in this agenda item.

[R2-2005488](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005488.zip) Introduction of UE capabilities for DL MIMO efficiency enhancement Huawei, Hisilicon CR Rel-16 36.331 16.0.0 4334 - B LTE\_DL\_MIMO\_EE-Core

[R2-2005489](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005489.zip) Introduction of UE capabilities for DL MIMO efficiency enhancement Huawei, Hisilicon CR Rel-16 36.306 16.0.0 1770 - B LTE\_DL\_MIMO\_EE-Core

## 7.9 LTE-based 5G Terrestrial Broadcast

(LTE\_terr\_bcast-Core; leading WG: RAN1; REL-16; target; March-20; WID: RP-182924)

Including documents related to WI-specific ASN.1 review issues.

A web conference may be used for handling some of the discussions in this agenda item.

[R2-2004429](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2004429.zip) Correction on the configuration of subframe #0 and #5 for MCH in MBMS dedicated cell Qualcomm Incorporated CR Rel-16 36.331 16.0.0 4259 2 F LTE\_terr\_bcast-Core R2-2003866

[R2-2005224](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005224.zip) MBMS UE capabilities per band for subcarrier spacing of 2.5 kHz and 0.37 kHz Qualcomm Technologies Int CR Rel-16 36.331 16.0.0 4307 - F LTE\_terr\_bcast-Core

[R2-2005227](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005227.zip) MBMS UE capabilities per band for subcarrier spacing of 2.5 kHz and 0.37 kHz Qualcomm Technologies Int CR Rel-16 36.306 16.0.0 1764 - F LTE\_terr\_bcast-Core

=> Revised in R2-2006060

R2-2006060 MBMS UE capabilities per band for subcarrier spacing of 2.5 kHz and 0.37 kHz Qualcomm Technologies Int CR Rel-16 36.306 16.0.0 1764 1 F LTE\_terr\_bcast-Core

[R2-2005490](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005490.zip) Clarification on MCCH configuration for 0.37kHz SCS Huawei, Hisilicon CR Rel-16 36.331 16.0.0 4335 - F LTE\_terr\_bcast-Core

R2-2006330 LS on categories for terrestrial broadcast (R1-2004912; contact: Qualcomm) RAN1 LS out LTE\_terr\_bcast-Core To:RAN2 Cc:RAN4

# 8 Breakout session reports

No documents shall be submitted to this AI or its sub-AIs. It is only for at-meeting-generated contents.

Breakout session reports will be approved by email.

## 8.1 Session on LTE legacy, LTE TEI16 and NR/LTE Rel-16 Mobility

[R2-2005731](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005731.zip) Report from session on LTE legacy, LTE TEI16 and NR/LTE Rel-16 Mobility Vice Chairman (Nokia) report

## 8.2 Session on SRVCC, CLI, PRN, eMIMO, RACS

[R2-2005732](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005732.zip) Report from Break-Out Session on SRVCC, CLI, PRN, eMIMO, RACS Vice Chairman (ZTE) report

## 8.3 Session on eMTC

[R2-2005733](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005733.zip) Report eMTC breakout session Session chair (Ericsson) report

## 8.4 Session on NR-U, Power Savings, NTN and 2-step RACH

[R2-2005734](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005734.zip) Session minutes for NR-U, Power Savings, NTN and 2-step RACH Session chair (InterDigital) report

## 8.5 Session on Rel-15 and 16 LTE and NR positioning

[R2-2005735](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005735.zip) Report from session on positioning and on-demand SI in connected Session chair (MediaTek) report

## 8.6 Session on SON/MDT

[R2-2005736](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005736.zip) Report from SOM/MDT session Session chair (CMCC) report

## 8.7 Session on NB-IoT

[R2-2005737](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_110-e\Docs\R2-2005737.zip) Report NB-IoT breakout session Session chair (Huawei) report

## 8.8 Session on LTE V2X and NR V2X

R2-2005738 Report from session on LTE V2X and NR V2X Session chair (Samsung) report