3GPP TSG-RAN WG2 Meeting #126 R2-240xxx

Fukuoka, Japan May 20th – 26th, 2024

Source: Session Chair Johan (Mediatek)

Title: Report from session on Mobility Enh and Mobile IAB (Rel-18)

## 7.4 Further NR mobility enhancements

(NR\_Mob\_enh2-Core; leading WG: RAN2; REL-18; WID:RP-233970)

Time budget: 0 TU)

Tdoc Limitation: 4 tdocs (if you want to input beyond the tdoc limitation, please cooperate with CR Rapporteurs).

### 7.4.1 Organizational

Including LSs.

Including outcome of [Post125bis][519][R18 Mob] Power Control Parameters after LTM cell switch (Fujitsu), with Scope: Collect RAN2 input in order to determine impacts and make decision as requested in R1 LS R1-2403683.

[R2-2404126](C:\\Users\\mtk65284\\Documents\\3GPP\\tsg_ran\\WG2_RL2\\TSGR2_126\\Docs\\R2-2404126.zip" \o "C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404126.zip) Reply LS on n-TimingAdvanceOffset for PDCCH order RACH (R4-2406444; contact: Apple) RAN4 LS in Rel-18 NR\_Mob\_enh2-Core To:RAN2 Cc:RAN1

[R2-2404115](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404115.zip) LS on the identification of the power control parameters after LTM cell switch (R1-2403683; contact: Fujitsu) RAN1 LS in Rel-18 NR\_Mob\_enh2-Core To:RAN

[R2-2404619](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404619.zip) Summary of [Post125bis][519][R18 Mob] Power Control Parameters after LTM cell switch (Fujitsu) Fujitsu discussion Rel-18 NR\_Mob\_enh2-Core Late

[R2-2404620](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404620.zip) [Draft] Reply LS on the identification of the power control parameters after LTM cell switch Fujitsu LS out Rel-18 NR\_Mob\_enh2-Core To:RAN1 Late

### 7.4.2 Stage-2 Corrections

Corrections to 38300 (MTK) and 37340 (ZTE) and stage-2 centric issues (including tdocs on stage-2 centric issue that also impact other TS). Preferably work with CR Rapporteurs for Stage-2 corrections instead of separate CRs.

Agreed in-principle

[R2-2404607](C:\\Users\\mtk65284\\Documents\\3GPP\\tsg_ran\\WG2_RL2\\TSGR2_126\\Docs\\R2-2404607.zip" \o "C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404607.zip) Stage-2 corrections on LTM Mediatek Inc. CR Rel-18 38.300 18.1.0 0842 2 F NR\_Mob\_enh2-Core R2-2404009

[R2-2405058](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405058.zip) Miscellaneous corrections for mobility enhancements ZTE Corporation CR Rel-18 37.340 18.1.0 0392 - F NR\_Mob\_enh2-Core

Same as CR 0391 which was agreed in-principle?

Measurement gaps LTM / NR-DC

[R2-2405527](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405527.zip) Discussion on measurement gaps for LTM in NR-DC Samsung discussion

PDCP impact

[R2-2404781](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404781.zip) Discussion on PDCP SN gap at LTM fast recovery NTT DOCOMO, INC. discussion Rel-18

Moved from 7.4.3.1

### 7.4.3 RRC Corrections

RRC corrections and Control Plane Centric Issues (including tdocs on control plane centric issue that also impact other TS). Including ASN.1 review issues and their resolutions. For RRC issues, please input to ASN.1 review rather than just providing a tdoc. Including outcome of [Post125bis][510][R18Mob] RRC CR (Ericsson),

[R2-2404967](C:\\Users\\mtk65284\\Documents\\3GPP\\tsg_ran\\WG2_RL2\\TSGR2_126\\Docs\\R2-2404967.zip" \o "C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404967.zip) Miscellaneous corrections on further mobility enhancements in NR Ericsson CR Rel-18 38.331 18.1.0 4705 1 F NR\_Mob\_enh2-Core R2-240317

[R2-2404970](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404970.zip) RILs conclusions for feMob Ericsson discussion Rel-18 NR\_Mob\_enh2-Core

New propAgree L063?

#### 7.4.3.1 L1L2 Triggered Mobility

TCI state related configurations

[R2-2405216](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405216.zip) [H094][H095] Issues on LTM-TCI-Info Huawei, HiSilicon discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2404298](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404298.zip) Candidate TCI states issues in LTM and LS from RAN1 MediaTek inc. discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2404771](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404771.zip) Linkage between candidate TCI states and TCI states inside candidate cell configuration Panasonic discussion

Move from 7.4.4

[R2-2404300](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404300.zip) LTM with 2TA co-existance MediaTek inc. discussion Rel-18 NR\_Mob\_enh2-Core

Other corrections

[R2-2405595](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405595.zip) Control plane centric issues for LTM Langbo discussion Rel-18 38.331 NR\_Mob\_enh2-Core

[R2-2404804](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404804.zip) [B123] Coexistence of LTM recovery and CHO recovery Lenovo discussion Rel-18

[R2-2405467](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405467.zip) RLC entity handling for IAB/mIAB during LTM execution Samsung discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2404437](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404437.zip) Remaining issues on s-Measure and recovery after RLF due to RLC retransmission vivo discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2404968](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404968.zip) [E400] Issues on INM signalling and power control parameters for LTM Ericsson discussion Rel-18 NR\_Mob\_enh2-Cor

[R2-2405059](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405059.zip) Discussion on remaining issues for LTM ZTE Corporation discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2404805](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404805.zip) [B120][B121]Coexistence of LTM and conditional reconfiguration Lenovo discussion Rel-18

[R2-2404828](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404828.zip) [G125] Discussion on LTM cell switch execution during fast MCG recovery procedure Google Inc. discussion Rel-18 38.331 NR\_Mob\_enh2-Core R2-2403454

[R2-2405144](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405144.zip) On Early decoding, power control for UL transmission after LTM switch and coexistence with NES Nokia discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2404438](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404438.zip) [E231][E240]RRC issues on LTM vivo discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2405482](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405482.zip) [X131] Discussion on the SFN acquisition for LTM Xiaomi discussion Rel-18 NR\_Mob\_enh2-Core

Withdrawn

[R2-2405159](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405159.zip) On the selection of RA preambles for LTM recovery [N161] Nokia discussion Rel-18 NR\_Mob\_enh2-Core Withdrawn

#### 7.4.3.2 Conditional Mobility

Includes both Subsequent CPAC and CHO including target MCG and candidate SCGs for CPC CPA in NR-DC.

[R2-2404439](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404439.zip) [V138] Discussion on simultaneous evaluation for both condExecutionCond and condExecutionCondSCG vivo, CATT, OPPO, LG Electronics discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2405060](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405060.zip) [Z062][Z063][Z064] Remaining issues for subsequent CPAC ZTE Corporation discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2404483](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404483.zip) Open issues for subsequent CPAC Ericsson discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2404605](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404605.zip) [E220] Issue on the presence of sk-counter in SCPAC CATT discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2404606](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404606.zip) Remaining SCPAC issues CATT discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2404415](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404415.zip) Discussion on remaining issues for SCPAC execution OPPO discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2404412](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404412.zip) Discussion on L2 reset for SCPAC execution OPPO, NEC discussion Rel-18 NR\_Mob\_enh2-Core

MCG reset

[R2-2405190](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405190.zip) On MCG Reset handling for SCPAC in MN-Format Nokia discussion

[R2-2405217](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405217.zip) [C147] MAC behaviours in SCPAC Huawei, HiSilicon discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2405386](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405386.zip) [C147] MCG MAC reset upon SCPAC execution CATT discussion NR\_Mob\_enh2-Core

#### 7.4.3.3 Reporting of Idle Inactive and reselection measurements

Endorsed Draft CRs

[R2-2405561](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405561.zip) UE capability for EMR and reselection measurements Nokia draftCR Rel-18 38.331 18.1.0 NR\_Mob\_enh2-Core

[R2-2405562](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405562.zip) UE capability for EMR and reselection measurements Nokia draftCR Rel-18 38.306 18.1.0 NR\_Mob\_enh2-Core

Corrections

[R2-2405563](file:///C:\\Users\\mtk65284\\Documents\\3GPP\\tsg_ran\\WG2_RL2\\TSGR2_126\\Docs\\R2-2405563.zip" \o "C:Usersmtk65284Documents3GPPtsg_ranWG2_RL2TSGR2_126DocsR2-2405563.zip) EMR and reselection measurements details Nokia discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2404379](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404379.zip) Discussion on eEMR SCell setup delay vivo discussion

[R2-2404484](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404484.zip) Discussion on early measurements enhancements Ericsson discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2405061](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405061.zip) Remaining issues on eEMR and IMR ZTE Corporation discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2405218](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405218.zip) [H146][H147][H166][H167][H168] Issues on EMR and reporting of cell reselection results Huawei, HiSilicon discussion Rel-18 NR\_Mob\_enh2-Core

### 7.4.4 MAC Corrections

MAC corrections and User Plane Centric Issues (including tdocs on user plane centric issue that also impact other TS)

In-principle agreed CR

[R2-2405219](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405219.zip) Miscellaneous corrections for further mobility enhancements Huawei, HiSilicon CR Rel-18 38.321 18.1.0 1817 2 F NR\_Mob\_enh2-Core R2-2404023

Corrections

[R2-2404229](C:\\Users\\mtk65284\\Documents\\3GPP\\tsg_ran\\WG2_RL2\\TSGR2_126\\Docs\\R2-2404229.zip" \o "C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404229.zip) MAC corrections for LTM Samsung discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2405331](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405331.zip) UL grant handling during RACH-less LTM cell switch LG Electronics Inc, Lenovo, ZTE Corporation discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2405220](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405220.zip) MAC remaining issues for LTM Huawei, HiSilicon discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2405661](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405661.zip) On the selection of RA preambles for LTM recovery [N161] Nokia discussion Rel-18

Moved from 7.4.3.1

[R2-2405663](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405663.zip) Remaining MAC issues for LTM Nokia discussion Rel-18

[R2-2405181](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405181.zip) Consideration On Remaining Issues For LTM ZTE Corporation discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2404413](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404413.zip) Discussion on remaining MAC issues for LTM OPPO discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2404414](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404414.zip) Issues on supporting MIMO 2TA for LTM OPPO discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2404440](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404440.zip) Discussion on MAC open issue for LTM vivo discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2404920](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404920.zip) Discussion on TCI state in LTM command MAC CE NEC discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2404969](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404969.zip) Remaining MAC issues for LTM Ericsson discussion Rel-18 NR\_Mob\_enh2-Core

[R2-2405421](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405421.zip) Discussion on fallback RACH for LTM ASUSTeK discussion Rel-18 38.331 NR\_Mob\_enh2-Core R2-2402579

[R2-2405422](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405422.zip) Discussion on LTM candidate configuration for different CGs ASUSTeK discussion Rel-18 38.321 NR\_Mob\_enh2-Core R2-2402580

withdrawn

[R2-2405160](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405160.zip) Remaining MAC issues for LTM Nokia discussion Rel-18 NR\_Mob\_enh2-Core Withdrawn

### 7.4.5 UE capabilities

Including outcome of [Post125bis][516][R18Mob] UE cap CRs (Intel)

Email disc

[R2-2404272](C:\\Users\\mtk65284\\Documents\\3GPP\\tsg_ran\\WG2_RL2\\TSGR2_126\\Docs\\R2-2404272.zip" \o "C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404272.zip) Draft 306 CR for UE capability for feMob Intel Corporation draftCR Rel-18 38.306 18.1.0 NR\_Mob\_enh2-Core

[R2-2404273](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404273.zip) Draft 331 CR for UE capability for feMob Intel Corporation draftCR Rel-18 38.331 18.1.0 NR\_Mob\_enh2-Core

Corrections

[R2-2404705](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404705.zip) Band-pair signalling for Early TA acquisition UE capabilities         Qualcomm Incorporated   discussion       Rel-18 NR\_Mob\_enh2-Core

Moved from 7.0.1

[R2-2405245](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405245.zip) Mobility UE capabilities with Per band pair per band combination granularity  Huawei, HiSilicon   discussion       Rel-18 NR\_Mob\_enh2-Core

Moved from 7.0.1

[R2-2404299](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404299.zip) LTM UE capabilities MediaTek inc. discussion Rel-18 NR\_Mob\_enh2-Core

## 

## 7.12 Mobile IAB (Integrated Access and Backhaul) for NR

( NR\_mobile\_IAB -Core; leading WG: RAN3; REL-18; WID: [RP-232669](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_101/Docs/RP-232669.zip))

Time budget: N/A

Tdoc Limitation: 1 tdocs (if you want to input beyond the tdoc limitation, please cooperate with CR Rapporteurs).

### 7.12.1 Organizational and Stage-2

LS in. Includes TS impacts 38300 and Stage-2 Centric issues (can also cover secondary impacts to other TSes)

Agreed-in-principle CRs

[R2-2405556](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405556.zip) Clarification on supporting two logical DUs and connecting via stationary IAB node ZTE, Qualcomm, Ericsson, Samsung, Nokia CR Rel-18 38.300 18.1.0 0853 2 F NR\_mobile\_IAB-Core R2-2403959

[R2-2405686](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2405686.zip) Mismatch of terminology between 38.304 and 38.331 Samsung CR Rel-18 38.304 18.1.0 0398 1 F NR\_mobile\_IAB-Core R2-2402936

[R2-2404960](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404960.zip) Miscellaneous corrections on Mobile IAB Ericsson CR Rel-18 38.331 18.1.0 4701 2 F NR\_mobile\_IAB-Core R2-2404018

Other

[R2-2404961](file:///C:\Users\mtk65284\Documents\3GPP\tsg_ran\WG2_RL2\TSGR2_126\Docs\R2-2404961.zip) RILs conclusions for mobile IAB Ericsson discussion Rel-18 NR\_mobile\_IAB-Core

All RIL issues closed

### 7.12.2 Stage-3

For multi-TS input, it is allowed to input also here.

#### 7.12.2.1 BAP

TS impacts 38340 and BAP Centric issues (can also cover secondary impacts to other TSes if applicable)

#### 7.12.2.2 Control plane corrections

TS impacts 38331, ASN.1 RIL, UE capabilities and 38.304

#### 7.12.2.3 User plane corrections

TS impacts 38321