3GPP TSG-RAN WG2 Meeting #126 draft R2-2405702

Fukuoka, Japan May 20th – 26th, 2024

Source: RAN2 Vice Chairman (CATT)

Title: Report from session on R18 MIMOevo, R18 MUSIM, and R19 LP-WUS

## Orgnizational email discussion

* [AT126][200] Organizational – MIMOevo, MUSIM, and LPWUS (RAN2 VC)

Scope: a) Share plans and list of ongoing email discussions for the related sessions, and b) Share meetings notes and agreements for review and endorsement

## 7.17 Dual Transmission/Reception (Tx/Rx) Multi-SIM for NR

(NR\_DualTxRx\_MUSIM-Core; leading WG: RAN2; REL-18; WID: [RP-233071](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_100/Docs/RP-231461.zip))

Time budget: 0 TU

Tdoc Limitation: 2 tdocs

### 7.17.1 Organizational

Rapporteur input, i.e., WI/Spec Rapporteur(s) are invited to provide updated open issues lists that need to be handled.

Incoming LS.

Corrections to TS 38.300.

R2-2404386 RILs\_conclusion\_MUSIM vivo(Rapporteur) other Rel-18 NR\_DualTxRx\_MUSIM-Core

R2-2404387 Correction on NR MUSIM enhancements vivo CR Rel-18 38.331 18.1.0 4776 - F NR\_DualTxRx\_MUSIM-Core

R2-2404388 Correction on NR MUSIM enhancements vivo CR Rel-18 38.331 18.1.0 4777 - F NR\_DualTxRx\_MUSIM-Core

R2-2404478 Clarification to R18 MUSIM UE Capabilities Huawei, HiSilicon draftCR Rel-18 38.306 18.1.0 NR\_DualTxRx\_MUSIM-Core

### 7.17.2 RRC

Corrections to RRC (other than UE capabilities, which should be submitted to 7.17.3).

Discussions and proposals on the RRC open issues if listed by Rapporteur(s) or triggered by LSs, etc..

R2-2404610 [Z103][Z115][Z117] Discussion on MUSIM RILs vivo discussion Rel-18 NR\_DualTxRx\_MUSIM-Core

R2-2404719 [RIL Z116] [RIL Z103] Consideration on the MUSIM UAI Reporting ZTE Corporation, Sanechips discussion Rel-18 NR\_DualTxRx\_MUSIM-Core

R2-2404744 [RIL Z115] [RIL Z117] Correction to the MUSIM Gap Configuration ZTE Corporation, Sanechips, Samsung discussion Rel-18 NR\_DualTxRx\_MUSIM-Core

R2-2404706 Discussion on stopping of the wait timer Huawei, HiSilicon discussion

R2-2405537 Wait Timer Stop Handling LG Electronics discussion Rel-18 NR\_DualTxRx\_MUSIM-Core

R2-2405642 Discussion on UE behavior upon T348 stop and T348 expiry Samsung Electronics Czech discussion Rel-18 NR\_DualTxRx\_MUSIM-Core

R2-2405689 Discussion on clarification of the action upon T348 expiry China Telecom Corporation Ltd. discussion NR\_DualTxRx\_MUSIM-Core

R2-2404745 Consideration on the Reconfiguration Failure Processing When T348 is Running ZTE Corporation, Sanechips discussion Rel-18 NR\_DualTxRx\_MUSIM-Core

R2-2404792 SpCells in MUSIM capability restriction signalling Ericsson discussion Rel-18 NR\_DualTxRx\_MUSIM-Core

R2-2404793 Intra-band CA in MUSIM capability restriction signalling Ericsson discussion Rel-18 NR\_DualTxRx\_MUSIM-Core

R2-2405191 Additional capability restrictions related to measurement gaps Nokia discussion

R2-2405192 Clarification on DAPS Handover for MUSIM Dual TX/RX operation Nokia discussion

R2-2405641 Discussion on PSCell release for MUSIM operation Samsung Electronics Czech discussion Rel-18 NR\_DualTxRx\_MUSIM-Core

R2-2404242 Discussion on restriction of per FR/UE report for maximum CC number Huawei, HiSilicon discussion Rel-18 NR\_DualTxRx\_MUSIM-Core

### 7.17.3 Other

UE capabilities related corrections.

Corrections to TS 37.340.

Other issues if not covered by the previous agenda items.

## 7.20 NR MIMO evolution

(NR\_MIMO\_evo\_DL\_UL-Core; leading WG: RAN1; REL-18; WID: [RP-233028](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_98e/Docs/RP-223276.zip))

Time budget: 0TU

Tdoc Limitation: 2 tdoc

### 7.20.1 Organizational

Rapporteur input, i.e., WI/Spec Rapporteur(s) are invited to provide updated open issues lists that need to be handled.

Incoming LS.

Stage 2 corrections.

R2-2404215 Correction to MIMO Evolution Ericsson CR Rel-18 38.331 18.1.0 4775 - F NR\_MIMO\_evo\_DL\_UL-Core

R2-2405589 Clarification of PDCCH ordered CFRA for 2TA NTT DOCOMO, INC., Samsung draftCR Rel-18 38.300 18.1.0 F NR\_MIMO\_evo\_DL\_UL-Core

### 7.20.2 MAC

Corrections to MAC.

Discussions and propsoals on the open issues if listed by Rapporteur(s) or triggered by LSs, ect..

R2-2405171 Corrections on PHR Samsung discussion Rel-18 NR\_MIMO\_evo\_DL\_UL-Core

R2-2404555 Remaining issues on STx2P PHR LG Electronics Inc. discussion Rel-18 NR\_MIMO\_evo\_DL\_UL-Core

R2-2404374 Discussion on PHR-Related Issues for STx2P CATT discussion Rel-18 NR\_MIMO\_evo\_DL\_UL-Core

R2-2404487 Correction on multi-TRP STx2P PHR MAC CE Nokia discussion Rel-18 NR\_MIMO\_evo\_DL\_UL-Core

R2-2405182 Cosideration On PHR and PHR MA CE for STxMP ZTE Corporation discussion Rel-18 NR\_MIMO\_evo\_DL\_UL-Core

R2-2405426 Discussion on introducing 8Tx in MAC specification ASUSTeK discussion Rel-18 38.321 NR\_MIMO\_evo\_DL\_UL-Core

R2-2405489 RAN4 impacts of 2TA for SDT Xiaomi discussion Rel-18 NR\_MIMO\_evo\_DL\_UL-Core

### 7.20.3 RRC

Corrections to RRC, RILs.

Discussions and proposals on the open issues if listed by Rapporteur(s) or triggered by LSs, ect..

R2-2404214 Remaining aspects on RRC for MIMOevo Ericsson discussion Rel-18 NR\_MIMO\_evo\_DL\_UL-Core

R2-2404375 [C520] [C521] [C522] [C523] [C524] Discussion on RRC Corrections for MIMO CATT discussion Rel-18 NR\_MIMO\_evo\_DL\_UL-Core

R2-2405222 [H169] Configuration of RACH for MIMO with 2TA Huawei, HiSilicon discussion Rel-18 NR\_MIMO\_evo\_DL\_UL-Core

R2-2405172 Clarification on UE capability enquiry with codebook type request Samsung discussion Rel-18 NR\_MIMO\_evo\_DL\_UL-Core

R2-2405183 Consideration on 2TA RRC Aspect ZTE Corporation discussion Rel-18 NR\_MIMO\_evo\_DL\_UL-Core

R2-2405690 Aperiodic CSI report with 2 resources for channel measurement and unified TCI framework Huawei, HiSilicon discussion Rel-18 NR\_MIMO\_evo\_DL\_UL-Core

## 8.4 Low-power wake-up signal and receiver for NR (LP-WUS/WUR)

(NR\_LPWUS-Core; leading WG: RAN1; REL-19; WID: [RP-240801](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_103/Docs/RP-240801.zip))

Time budget: 1 TU

Tdoc Limitation: 3 tdocs

### 8.4.1 Organizational

LS, Rapporteur input, including workplan, etc.

### 8.4.2 Procedure and configuration of LP-WUS in RRC\_IDLE/INACTIVE

Procedure and configuration of LP-WUS indicating paging monitoring triggered by LP-WUS, including at least configuration, sub-grouping and entry/exit condition for LP-WUS monitoring

Entry/exit condition

R2-2404460 Entering/Exit conditions, relaxed serving cell measurements on the main receiver and offload of measurements to LP-WUR Vodafone discussion Rel-19

*Proposal 2: It is proposed to define LP-WUR entering and exit conditions as follow:*

*• LP-WUR entering conditions are satisfied if corresponding thresholds as provided over broadcast using SIBs or dedicated signalling are fulfilled and the corresponding functionality is taken over by the LP-Receiver in accordance with the performance as defined by RAN WG4.*

*• LP-WUR exit conditions are satisfied if corresponding thresholds as provided over broadcast using SIBs or dedicated signalling are fulfilled and the corresponding functionality are taken over by the main receiver in accordance with the performance as defined by RAN WG4.*

R2-2404562 Discussion on LP-WUS in RRC\_IDLE/INACTIVE HONOR discussion Rel-19 NR\_LPWUS-Core

*Proposal 2: If the serving cell quality, e.g. legacy RSRP, (FFS the new measurement result based on LP-SS), is above configured threshold(s), UE can monitor LP-WUS and decide whether to monitor legacy (PEI) PO as indicated by LP-WUS.*

*Proposal 3: If the serving cell quality, e.g. legacy RSRP and / or the new measurement result based on LP-SS, is below a configured threshold, UE should monitor (PEI) PO as in legacy.*

Sub-grouping

R2-2404376 LP-WUS Operation in RRC\_IDLE/INACTIVE CATT discussion Rel-19 NR\_LPWUS-Core

*Proposal 1: The maximum number of subgroups for LP-WUS depends on RAN1 conclusion.*

*Proposal 2: For CN assigned subgrouping for LP-WUS, the similar procedure for CN assigned subgrouping for PEI is reused.*

*Proposal 3: Send an LS to SA2/CT1/RAN3 for the design of CN assigned subgrouping for LP-WUS.*

*Proposal 4: For UE\_ID based subgrouping for LP-WUS, similar formula for PEI subgrouping is reused, i.e.,*

*SubgroupID = (floor (UE\_ID/(N\*Ns)) mod subgroupsNumForUEID\_LP) + (subgroupsNumPerPO\_LP – subgroupsNumForUEID\_LP), where*

*UE\_ID is related to 5G-S-TMSI, detail FFS,*

*N is the number of total paging frames in DRX cycle,*

*Ns is the number of the PO for a PF,*

*subgroupsNumForUEID\_LP and subgroupsNumPerPO\_LP are the subgroup number for UE\_ID based subgrouping for LP-WUS and the total subgroup number for LP-WUS, respectively.*

*Proposal 5: It is up to network implementation that UEs belong to the same LP-WUS subgrouping are expected to be assigned to different PEI subgroupings. No specification impact is needed.*

R2-2405637 Procedure and Configuration of LP-WUS in RRC IDLE/INACTIVE Lenovo discussion Rel-19 NR\_LPWUS-Core

*Proposal 6: The maximum number of subgroups that can be configured for LP-WUS subgrouping is 8.*

*Proposal 7: RAN2 to discuss the inclusion of a LP-WUS Subgrouping Configuration in the SIB signalling.*

*Proposal 8: RAN2 to discuss the configuration of 2-level subgrouping to reduce false alarm rates in comparison to legacy PEI.*

SI reception

R2-2404459 Discussion on procedure and configuration of LP-WUS in RRC\_IDLE/INACTIVE Huawei, HiSilicon discussion

*Proposal 9: Only the necessary system information needs to be maintained when UE is working with LP-WUR in RRC\_IDLE/INACTIVE modes.*

*Proposal 10: Introduce a common LP-WUS to wake up all the UEs in RRC\_IDLE/INACTIVE if the subgrouping information in LP-WUS is indicated in a codepoint way.*

R2-2405577 LP-WUS operation in IDLE/Inactive state Qualcomm Incorporated discussion NR\_LPWUS-Core

*Proposal 12 From RAN2 perspective, LP-WUS should be able to wake up all UEs to monitor paging for SI update/ETWS/CMAS notification. How to support LP-WUS to indicate all the UEs is left to RAN1 discussion.*

R2-2404295 General considerations on the procedure for RRC\_IDLE\_INACTIVE Xiaomi Communications discussion

R2-2404314 LP-WUS procedure in RRC\_IDLE INACTIVE NEC discussion Rel-19 NR\_LPWUS-Core

R2-2404418 Discussion on LP-WUS WUR in RRC\_IDLE INACTIVE vivo discussion Rel-19 NR\_LPWUS-Core

R2-2404469 LP-WUS in IDLE and INACTIVE Nokia discussion Rel-19 NR\_LPWUS-Core

R2-2404588 Discussion on procedure and configuration of LP-WUS in RRC\_IDLE/INACTIVE OPPO discussion Rel-19 NR\_LPWUS-Core

R2-2404674 Procedure and configuration of LP-WUS in RRC\_IDLE/INACTIVE Apple discussion Rel-19 NR\_LPWUS-Core

R2-2404860 Procedure and configuration of LP-WUS for IDLE and INACTIVE mode ZTE Corporation, Sanechips discussion Rel-19 NR\_LPWUS-Core

R2-2404906 RAN2 aspects on LP-WUS/WUR in RRC Idle/Inactive mode Sony discussion Rel-19 NR\_LPWUS-Core

R2-2404927 Discussion on LP-WUS operation in IDLEI/NACTIVE mode Spreadtrum Communications discussion Rel-19

R2-2404996 WUR in Idle and Inactive Ericsson discussion Rel-19 NR\_LPWUS-Core

R2-2405223 LP-WUS in RRC\_IDLE and RRC\_INACTIVE LG Electronics Inc. discussion Rel-19 NR\_LPWUS-Core

R2-2405308 Discussion on procedure and configuration of LP-WUS in RRC\_IDLE/INACTIVE China Telecom discussion Rel-19 NR\_LPWUS-Core

R2-2405325 Discussion on LP-WUS operation in RRC\_IDLE/INACTIVE modes InterDigital, Inc. discussion Rel-19 NR\_LPWUS-Core

R2-2405354 Discussion on entry exit conditions for LP-WUS monitoring Sharp discussion

R2-2405409 Procedure and Configuration of LP-WUS in RRC Idle Inactive Mode Samsung discussion Rel-19

R2-2405497 LP-WUS operation in IDLE/INACTIVE modes CMCC discussion Rel-19 NR\_LPWUS-Core

R2-2405638 Discussion on Procedure and configuration in RRC\_IDLE-INACTIVE NTT DOCOMO INC.. discussion Rel-19 NR\_LPWUS-Core

R2-2405695 Discussion on LP-WUS\_WUR entry and exit conditions for RRC Idle\_Inactive mode KT Corp. discussion Rel-19 NR\_LPWUS-Core Late

### 8.4.3 RRM measurement relaxation and offloading in RRC\_IDLE/INACTIVE

RRM relaxation of UE MR for both serving and neighbor cell measurements, and UE serving cell RRM measurement offloaded from MR to LP-WUR, including the necessary conditions

Serving cell measurements related

R2-2404315 LP-WUS RRM measurement relaxation NEC discussion Rel-19 NR\_LPWUS-Core

*Proposal 1: RAN2 to consider the following solutions on serving cell measurement during LP-WUS monitoring mode:*

*Option-1: serving cell measurement fully offloaded to LR (i.e., no serving cell measurement via MR is required), the LR serving cell measurement requirement is decided by RAN4/1.*

*Option-2: serving cell measurement partially offloaded to LR (i.e., relaxed serving cell measurement via MR is still required), the LR and MR serving cell measurement requirement is decided by RAN4/1*

*Proposal 2: if proposal 1 is agreed, send an LS to RAN4/1 to ask discussing those feasibilities and related requirements.*

R2-2405224 RRM relaxation and RRM offloading LG Electronics Inc. discussion Rel-19 NR\_LPWUS-Core

*Proposal 1 The RRM relaxation in this WI means the RRM measurements using MR with relaxed measurement requirements to be defined by RAN4 without any involvement of LP-WUS/LP-WUR.*

*Proposal 2 The RRM offloading in this WI means performing LP-SS or PSS/SSS measurement using LP-WUR and not performing serving cell measurements using MR.*

*Proposal 3 For serving cell measurement relaxation, RAN2 should focus on specifying the relaxed measurement criterion for serving cell, and assume that RAN4 will define the relaxed measurement requirements for serving cell.*

*Proposal 4 Consider the two relaxed measurement criteria in Rel-16, i.e. criterion for UE with low mobility and criterion for UE not at cell edge, as baseline for relaxed measurement criterion for serving cell.*

*Proposal 6 RAN2 specifies the criterion for serving cell measurement offloading.*

Neighboring cell measurements related

R2-2405013 Discussion on RRM measurement relaxation/offloading in IDLE/INACTIVE modes CMCC discussion Rel-19 NR\_LPWUS-Core

*Proposal 8: The RRM measurement of the neighboring cell can only be performed by MR.*

*Proposal 9: The neighbor cell measurement relaxation mechanism in Release 16 can be reused(e.g., not at cell edge and low mobility).*

*Proposal 10a: For high-priority neighboring cells, if Threshold1>SSearchThresholdP, the “low mobility” relaxation entry condition uses the LR-based serving cell measurement results.*

*Proposal 10b: For high-priority neighboring cells, if Threshold1<SSearchThresholdP, both “low mobility” relaxation entry condition and “not at cell edge” relaxation entry condition uses the LR-based serving cell measurement results.*

*Proposal 11a: For equal or low priority neighboring cells, if SnonIntraSearchP>Threshold1>SSearchThresholdP, the “low mobility” relaxation entry condition uses the LR-based serving cell measurement results.*

*Proposal 11b: For equal or low priority neighboring cells, if SSearchThresholdP>Threshold1, both “low mobility” relaxation entry condition and “not at cell edge” relaxation entry condition uses the LR-based serving cell measurement results.*

*Proposal 11c: For equal or low priority neighboring cells, if Threshold1> SnonIntraSearchP, there is no effect on existing conditions.*

R2-2404301 Discussion on RRM measurement relaxation for RRC\_IDLE\_INACTIVE Xiaomi Communications discussion

R2-2404323 Discussion on RRM measurement relaxation and offloading in RRC\_IDLE/INACTIVE Huawei, HiSilicon discussion Rel-19 NR\_LPWUS-Core

R2-2404377 RRM Relaxation and Offloading in RRC\_IDLE/INACTIVE CATT discussion Rel-19 NR\_LPWUS-Core

R2-2404399 Discussion on RRM measurement relaxation and offloading in RRC\_IDLE/INACTIVE China Telecom discussion

R2-2404419 Discussion on RRM measurement relaxation and offloading in RRC\_IDLE/INACTIVE vivo discussion Rel-19 NR\_LPWUS-Core

R2-2404470 RRM measurement relaxation in RRC\_IDLE/INACTIVE Nokia discussion Rel-19 NR\_LPWUS-Core

R2-2404583 Discussion on RRM measurement in RRC IDLE and INACTIVE OPPO discussion Rel-19 NR\_LPWUS-Core

R2-2404675 RRM measurement relaxation and offloading in RRC\_IDLE/INACTIVE Apple discussion Rel-19 NR\_LPWUS-Core

R2-2404808 RRM measurement relaxation and offloading in RRC\_IDLE/INACTIVE Lenovo discussion Rel-19

R2-2404861 RRM measurement relaxation for IDLE and INACTIVE mode ZTE Corporation, Sanechips discussion Rel-19 NR\_LPWUS-Core

R2-2404907 Discussion on RRMRAN2 aspects foron LP-WUS/WUR Sony discussion Rel-19 NR\_LPWUS-Core

R2-2404928 Discussion on RRM measurement relaxation and offloading in IDLE/INACTIVE mode Spreadtrum Communications discussion Rel-19

R2-2404997 WUR and RRM measurements Ericsson discussion Rel-19 NR\_LPWUS-Core

R2-2405328 Discussion on RRM measurement relaxation and offloading InterDigital, Inc. discussion Rel-19 NR\_LPWUS-Core

R2-2405355 Discussion on serving cell RRM measurement offloading Sharp discussion

R2-2405410 RRM measurement relaxation and offloading in RRC Idle Inactive Mode Samsung discussion Rel-19

R2-2405579 LP-WUS RRM measurement relaxation and offloading Qualcomm Incorporated discussion NR\_LPWUS-Core

### 8.4.4 Procedures for LP-WUS in RRC\_CONNECTED

Procedures to allow UE MR PDCCH monitoring triggered by LP-WUS including activation and deactivation procedure of LP-WUS monitoring.

R2-2404420 Discussion on LP-WUS WUR in RRC\_Connected vivo discussion Rel-19 NR\_LPWUS-Core

*Proposal 1: In RRC\_CONNECTED mode, RAN2 to further discuss the impacts of LP-WUS operation methods identified in RAN1.*

*Proposal 2: For LP-WUS procedure to trigger PDCCH monitoring Option 1-1, similar as DCP, the LP-WUS monitoring occasion locates at a configured time offset before the start of drx-onDurationTimer. The range of time offset can be determined by RAN1.*

*Proposal 3: For LP-WUS procedure to trigger PDCCH monitoring Option 1-1, RAN2 assumes the solutions/ operations introduced for DCP are re-used by default, unless any critical issue is identified.*

*Proposal 4: RAN2 assumes Option 1-2-1 could excluded.*

*Proposal 5: For LP-WUS procedure to trigger PDCCH monitoring Option 1-2-2, LP-WUS only impacts the PDCCH monitoring outside C-DRX Active Time and during legacy drx-onDurationTimer, i.e. UE should keep monitoring PDCCH during the C-DRX Active Time other than the time when drx-onDurationTimer is running, even no LP-WUS has been detected.*

*Proposal 6: For LP-WUS procedure to trigger PDCCH monitoring Option 1-2-2, the following solutions on how to stop the PDCCH monitoring could be considered:*

*− The UE stops the PDCCH monitoring upon receiving the PDCCH skipping indication;*

*− Using a timer for PDCCH monitoring triggered by LP-WUS, and the UE performs PDCCH monitoring until the timer is expired. FFS whether a new timer or reuse legacy DRX timer, e.g. drx-InactivityTimer.*

*Proposal 7: For LP-WUS procedures to trigger PDCCH monitoring Option 1-3, UE monitors the LP-WUS within the drx-onDurationTimer duration and the UE starts to monitor PDCCH only if the detected LP-WUS indicates UE to monitor PDCCH.*

*Proposal 8: For LP-WUS procedure to trigger PDCCH monitoring Option 1-3, LP-WUS only impacts the PDCCH monitoring during legacy drx-onDurationTimer, i.e. UE should keep monitoring PDCCH during the C-DRX Active Time other than the time when drx-onDurationTimer is running, even no LP-WUS has been detected.*

*Proposal 9: RAN2 assumes Option 1-2-2 should be supported for LP-WUS in RRC\_CONNECTED mode.*

*Proposal 10: In RRC\_CONNECTED mode, PDCCH monitoring triggered by LP-WUS is enabled/disabled by the corresponding configuration of LP-WUS. No additional assistance information from UE is needed.*

*Proposal 11: LP-WUS configuration is configured in RRCResume/RRCReconfiguration message.*

*Activation and deactivation procedure for LP-WUS monitoring*

*Proposal 12: In RRC\_CONNECTED mode, in case LP-WUS monitoring is enabled, activation/deactivation of LP-WUS monitoring by L1/L2 signaling is introduced. Details FFS.*

R2-2404862 Procedure for LP-WUS in RRC\_CONNECTED ZTE Corporation, Sanechips discussion Rel-19 NR\_LPWUS-Core

*Proposal 1: LP-WUS configuration for RRC-CONNECTED should be provided by UE specific signaling, and FFS on what information is configured.*

*Proposal 2: The provision of LP-WUS configuration via dedicated signaling is seen as an implicit activation to apply LP-WUS for UE in RRC\_CONNECTED state.*

*Proposal 3: RAN2 can postpone the discussion on whether to support L1/L2 activation/deactivation of LP-WUS in RRC-CONNECTED until there is agreement for the LP-SS and LP-WUS design in RAN1.*

*Proposal 4: RAN2 consider the option 1-1(e.g. LP-WUS replace DCP) as baseline for LP-WUS monitoring in RRC\_CONNECTED state.*

*Proposal 5: Whether to support Option 1-2(monitoring LP-WUS outside the C-DRX active time) or Option 1-3(monitoring LP-WUS inside the C-DRX active time) can wait for RAN1’s further agreement.*

R2-2405411 Procedures for LP-WUS in RRC Connected Mode Samsung discussion Rel-19

*Proposal 1. As a baseline scenario, RAN2 supports LP-WUS configuration before C-DRX on duration, similar as DCP (option 1-1).*

*Proposal 2. For the support of LP-WUS and associated PDCCH monitoring outside of C-DRX on duration, we need to wait for RAN1 progress.*

*Proposal 3. The LP-WUS related configuration for RRC CONNECTED state UE is provided via UE dedicated message, e.g., RRCReconfiguration.*

R2-2404244 Discussion on LP-WUS for RRC\_CONNECTED mode Huawei, HiSilicon discussion Rel-19 NR\_LPWUS-Core

R2-2404302 Discussing on LP-WUS monitoring for RRC\_Connected Xiaomi Communications discussion

R2-2404316 LP-WUS procedure in RRC\_CONNECTED NEC discussion Rel-19 NR\_LPWUS-Core

R2-2404378 Analysis on LP-WUS in RRC\_CONNECTED CATT discussion Rel-19 NR\_LPWUS-Core

R2-2404380 LP-WUS in RRC\_CONNECTED Nokia discussion NR\_LPWUS-Core

R2-2404584 Discussion on LP-WUS in RRC\_CONNECTED OPPO discussion Rel-19 NR\_LPWUS-Core

R2-2404676 Procedures for LP-WUS in RRC\_CONNECTED Apple discussion Rel-19 NR\_LPWUS-Core

R2-2404908 Considerations on LP-WUS/WUR in RRC Connected mode Sony discussion Rel-19 NR\_LPWUS-Core

R2-2404998 WUR in Connected Ericsson discussion Rel-19 NR\_LPWUS-Core

R2-2405033 Discussion on LP-WUS operation in CONNECTED mode CMCC discussion Rel-19 NR\_LPWUS-Core

R2-2405309 Discussion on procedures for LP-WUS in RRC\_CONNECTED China Telecom discussion Rel-19 NR\_LPWUS-Core

R2-2405332 Discussion on LP-WUS operation in RRC\_CONNECTED mode InterDigital, Inc. discussion Rel-19 NR\_LPWUS-Core

R2-2405468 Discussion on LP-WUS in RRC\_CONNECTED mode LG Electronics Inc. discussion Rel-19

R2-2405578 LP-WUS operation in CONNECTED state Qualcomm Incorporated discussion NR\_LPWUS-Core

R2-2405639 LP-WUS in RRC Connected Mode Lenovo discussion Rel-19 NR\_LPWUS-Core

R2-2405687 Discussion on LP-WUS in RRC\_CONNECTED NTT DOCOMO INC.. discussion Rel-19 NR\_LPWUS-Core

## List of post meeting email discussions

TBD