**3GPP TSG RAN meeting #107 RP-250041**

**Incheon, Korea, March 13-14th , 2025** *rev of RP-242462*

## Status Report to TSG

**Title: Status report for WID: Non-Terrestrial Networks (NTN) for NR Phase 3; rapporteur: Thales, CATT**

**Agenda item:** 9.3.2.2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **WI / SI Name** | Rel-19 Non-Terrestrial Networks (NTN) for NR Phase 3 | | | | |
| included in this status report | Study Item:  No | Core part:  Yes | Performance part:  Yes | | Testing part:  No |
| **Acronym** | NR\_NTN\_Ph3 | | | | |
| **Unique ID** | 1020097 | | | | |
| **TSG Tdoc of latest approved WI/SI description (if any)** | RP-243300 | | | | |
| **Target Completion Date**  **(indicate if changed)** | Study Item:  N/A | Core part:  09/2025 | Performance part: 03/2026 | Testing part: | |
| **Overall Completion level** | Study Item:  N/A | Core part:  Overall: 75%  RAN1: 75%  RAN2: 75%  RAN3: 80%  RAN4: 70% | Performance Part:  Overall: 0%  RAN4: 0% | Testing part: | |

Note: Overall completion level percentage numbers should use one of the colors below:

* xx%: Normal progress, no RAN plenary action needed
* xx%: Progress behind schedule, may need RAN plenary intervention. If so, SR should clearly define requested action
* xx%: Progress critically behind, RAN plenary shall intervene. SR should define requested action

**Source:**

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| --- | --- | --- |
| **Leading WG** | | RAN2 |
| **Rapporteur** | **Name** | Nicolas Chuberre |
| **Company** | Thales |
| **Email** | Nicolas.chuberre@thalesaleniaspace.com |
| **Name** | Jiancheng Sun |
| **Company** | CATT |
| **Email** | sunjiancheng@catt.cn |

## 1 Work plan related evaluation

|  |  |
| --- | --- |
| **Do you want to modify the time budget for this WI/SI compared to what was endorsed at the last RAN meeting?** | No |

*If you answered No: Then please remove the Excel file from the zip file of this status report.*

*If you answered Yes: Then please fill out the attached Excel template to request a modification of the time budgets for your WI /SI. The Excel table has to be filled out for all affected RAN WGs and up to the target date of the WI/SI. The basis are the endorsed time budgets of the last RAN meeting. Please highlight all changes of the values.  
 One time unit (TU) corresponds to ~ 2 hours in the meeting.  
 If this status report covers a WI with Core and Performance part, then please have one line for each in the attached Excel table.  
 Note: If no Excel table is attached, then this means no time budget change.*

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## 2. Detailed progress in RAN WGs since last TSG meeting (for all involved WGs)

NOTE: Agreements and Open issues impacted cross-TSG aspects shall be explicitly highlighted

## 2.1 RAN1

#### 2.1.1 Agreements

#### 2.1.1.1 Decisions during RAN1#120

**2.1.1.1.1 NR-NTN downlink coverage enhancement**

Agreement

For NR NTN, support extended periodicity of the half frames with SS/PBCH blocks assumed by UE during initial access.

* The additional default value assumed by UE during initial access (apart from the existing 20ms value) is 160 ms.

Agreement

Support only inter-slot repetition for Type0 PDCCH CSS.

Agreement

For Msg4 PDSCH repetition support, RAN1 to consider:

* Option 1: UE specific repetition indication via DCI
* Option 2: Msg4 repetition is configured by SIB1
* Option 3: Msg4 PDSCH repetition is implicitly determined by SIB1 PDSCH repetition

Agreement

At least for enabling PDCCH repetition for Type0 PDCCH CSS of searchSpaceZero configured within MIB pdcch-ConfigSIB1, RAN1 to consider the following options

* Option 1: Using the spare 1 bit in MIB
* Option 2: Using reserved bit(s) in PBCH payload
* Option 3: Using codepoint(s) in PBCH payload
* Option 4: UE blind decoding without signaling from the network during initial access

Agreement

For PDCCH repetition for Type0 PDCCH CSS of searchSpaceZero configured within MIB pdcch-ConfigSIB1, consider the following:

* Option 1: Support repeated PDCCH candidates in the two consecutive slots and associated with the same SSB index ( as defined in section 13 of TS 38.213)
  + Repeated PDCCH candidates share the same aggregation level (AL), coded bits and same candidate index
  + FFS: Details including how the two PDCCH candidates are counted toward the BD limits
  + Note: with option 1, if the network repeats the Type 0 PDCCH across two consecutive slots, a legacy UE might decode the PDCCH and associated PDSCH in one slot and skip PDCCH monitoring in the other slot.
  + FFS: whether/how option 1 can be applicable for M=1 and M= ½
* Option 2: Support repeated PDCCH candidates in the two slots and [or and ] associated with the same SSB index ( as defined in section 13 of TS 38.213)
  + Value of X>1, predefined or configured
    - FFS: Value of X
  + Repeated PDCCH candidates share the same aggregation level (AL), coded bits and same candidate index
  + FFS: Backward compatibility to legacy UE
* Option 3:
  + The PDCCH candidates in slots n0 associated respectively with different SSB indexes are repetitions of each other and share the same aggregation level, coded bits and same candidate index
    - For M=1/2 and M=1, the repeated PDCCH candidates in two consecutive slots associated with different SSB indexes;
    - For M=2, the PDCCH candidates in slots n0+1 associated respectively with different SSB indexes are repetitions of each other and share the same aggregation level, coded bits and same candidate index
* Option 4: Option 2 with cross SSB beam repetition support
  + The PDCCH candidates in slots n0 associated respectively with different SSB indexes are repetitions of each other and share the same aggregation level, coded bits and same candidate index

Agreement

For SIB1 link level enhancement, RAN1 to consider the following options:

* Option 1: PDSCH repetition of SIB1 is transmitted within the same slot as the type0-CSS PDCCH repetition.
  + UE supporting SIB1 PDSCH coverage enhancement assumes that the PDCCH and associated PDSCH to be repeated in both slots where the corresponding PDCCHs are transmitted.
  + Each PDSCH SIB1 repetition is within the same slot of each PDCCH candidate for scheduling DCI
  + The two associated PDSCHs have the same RV
* Option 2: Option 1 and an additional PDSCH with SIB1 repetition can occur after the slot of type0-PDCCH CSS repetition.
  + FFS: How to schedule the SIB1 repetition
* Option 3: The repetition of PDSCH with SIB1 is indicated by the scheduling PDCCH
  + PDSCH is repeated in two slots

Note: Backward compatibility should be maintained

**2.1.1.1.2 Support of RedCap and eRedCap UEs with NR NTN operating in FR1-NTN bands**

Agreement

When network indicates UL overriding DL in RRC-Connected mode for collision case 3, one UE-specific RRC parameter is used to indicate overriding for all the applicable other use cases except for collisions with Type-0/0A/1/2-PDCCH CSS.

**Conclusion**

For Rel-19 HD-FDD (e)Redcap UE with CG-SDT procedure ongoing in RRC-inactive mode, for collision case 3,

* Handling of collision with PDCCH CSS in RRC-inactive mode is left to UE implementation whether to prioritize UL or prioritize DL with the constraint in the following note.

Note: UE shall comply to the following existing procedure in 38.331:

* UEs in RRC\_INACTIVE while SDT procedure is not ongoing shall monitor for SI change indication in its own paging occasion(s) that the UE monitors as specified in TS 38.304 [20].
* UEs in RRC\_INACTIVE while SDT procedure is ongoing shall monitor for SI change indication in any paging occasion at least once per modification period, if the initial downlink BWP on which the SDT procedure is ongoing is associated with a CD-SSB.
* ETWS or CMAS capable UEs in RRC\_INACTIVE while SDT procedure is not ongoing shall monitor for indications about PWS notification in its own paging occasion every DRX cycle.
* ETWS or CMAS capable UEs in RRC\_INACTIVE while SDT procedure is ongoing shall monitor for indication about PWS notification in any paging occasion at least once every defaultPagingCycle.

**Working assumption**

For Rel-19 NTN HD-FDD (e)Redcap UE in RRC connected mode, the following handling rule for collision case 4 is supported:

* Handling of collision with PDSCH (at least for system information) scheduled by Type-0/0A[/1][/2]-PDCCH CSS in RRC-Connected mode is left to UE implementation whether to prioritize UL or prioritize DL with the constraint in the following note.
* FFS: handling of PDCCH ordered PRACH transmission
* For other use cases, default priority rule for collision case 4 in RRC-Connected mode is that [DL or UL] is prioritized.
  + Network is allowed to indicate [UL or DL] overriding [DL or UL] for all cases
    - This is signaled by one UE specific RRC parameter
  + Note: if DL is prioritized, the DL prioritization applies only if the UL cancellation timeline can be satisfied, otherwise UL is prioritized.

Note: UE shall comply to the following existing procedure in 38.331:

* UEs in RRC\_CONNECTED shall monitor for SI change indication in any paging occasion at least once per modification period if the UE is provided with common search space, including *pagingSearchSpace*, *searchSpaceSIB1* and *searchSpaceOtherSystemInformation*, on the active BWP to monitor paging, as specified in TS 38.213 [13], clause 13.

**2.1.1.1.3 NR-NTN uplink capacity/throughput enhancement**

**Conclusion**

For OCC time synchronization / alignment of multiplexed UEs to maintain orthogonality of the codes used for OCC, OCC group alignment is handled by network scheduling without specification impact.

**Conclusion**

OCC with Msg3 PUSCH is not in scope of Release 19 NR NTN Ph3.

Agreement

For RV cycling for OCC with DG-PUSCH, support Option 1

* Option 1: RV cycling is used across OCC groups.
  + Note: when option 1 is applied, RV cycling is applied when the number of repetitions is greater than the OCC length

No optimization in Rel-19 for pairing UEs with OCC2 and UEs with OCC4.

#### 2.1.2 Remaining Open issues

1. Address the anticipated specs impacts due to the extended SSB periodicity up to 160ms.

The additional default value assumed by UE during initial access (apart from the existing 20ms value) is 160 ms.

1. Introduce necessary features to support link level enhancements for the targeted physical channels, including: (1) PDCCH CSS for all CSS types except type 3. (2) PDSCH with Msg4. (3) PDSCH with SIB1.
2. Define necessary physical layer features enabling to support of RedCap and eRedCap UEs with NR NTN operating in FR1-NTN bands
3. Define necessary physical layer features to support NR-NTN uplink capacity/throughput enhancement

## 2.2 RAN2

#### 2.2.1 Agreements

2.2.1.1 Decisions during RAN2#129

**2.2.1.1.1 Downlink coverage enhancement**

Agreements:

1. RAN2 assumes it will be possible to have different SSB periodicity among neighbour cells in the same frequency layer

2. RAN2 assumes that in a NR NTN cell, SSB beam sweeping in different spatial directions is possible as in a NR TN cell: the whole cell is covered by the different SSB beams in half-frame

3. RAN2 also assumes that, with the current status of RAN1 discussion, if one cell is defined by multiple “satellite beams”, the satellite beams are all simultaneously active or inactive (“beam hopping” applies equally to all the satellite beams of a given cell)

4. The number of SMTC/gaps a UE needs to consider at any time will not be increased further

**2.1.1.1.2 Uplink capacity/throughput enhancement**

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**2.1.1.1.3 Support of Broadcast**

Agreements:

1. In the new SIB, explicit network-indicated area ID is used to label an intended service area in the list

2. It shall be possible to signal multiple service area IDs to one MBS service (we Insert a list of service area IDs in MCCH)

3. Introduce “warning area coordinates” in ETWS Primary Notification (SIB6) and in ETWS Secondary Notification (SIB7). FFS on the signalling details for “warning area coordinates” (SIB6 is not segmented)

**2.1.1.1.4 Support of Regenerative payload**

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#### 2.2.2 Remaining Open issues

**NR-NTN downlink coverage enhancement**

* Define procedures and related signalling for system-level power sharing following RAN1 conclusions and related signalling for link-level enhancements following RAN1 conclusion

**NR-NTN uplink capacity/throughput**

* Define necessary related procedures and signalling following RAN1 conclusions

**Support of broadcast**

* SIB content definition for intended service area and related procedures

## 2.3 RAN3

#### 2.3.1 Agreements

2.3.1.1 Decisions during RAN3#127

Endorsed as BL CRs:

* R3-250052 (BL CR to 38.410) Introduce NG Removal procedure (CMCC, Huawei, Nokia, Nokia Shanghai Bell, CATT, Ericsson, Qualcomm, Xiaomi, LG Electronics, China Telecom, Samsung, ZTE, NEC, ETRI) CR0051r2, TS 38.410 v18.2.0, Rel-19, Cat. B
* R3-250053 (BL CR to 38.300) Support for Regenerative Payload and MBS broadcast in NR NTN (Ericsson, Thales, Deutsche Telekom, Nokia, ESA, CATT, ZTE, Sateliot, Huawei, Dish Networks, Echostar, Eutelsat Group, Xiaomi, Samsung, CMCC, LG Electronics, NEC, Lenovo, ETRI)
* R3-250054 Support for Regenerative Payload and MBS broadcast in NR NTN (CATT, Thales, Nokia, Nokia Shanghai Bell, Ericsson, Huawei, ZTE, Qualcomm, Samsung, Xiaomi, CMCC, China Telecom, Jio, LG Electronics, NEC, ETRI, SES, ESA) CR1212r3, TS 38.413 v18.4.0, Rel-19, Cat. B

**2.3.1.1.1 Support MBS Broadcast service**

Agreements:

**Encode the Intended MBS service area as OCT STRING which refers to RAN2 spec.**

Agreed TPs

* R3-250870 (TPs to BL CR 38.300 and 38.413) Discussion on NTN broadcast service supporting (ZTE Corporation, Nokia, Nokia Shanghai Bell, Huawei, Qualcomm, CATT)
* R3-250893 (TP for TS 38.300 and TS 38.413) Support MBS broadcast service (Huawei, Nokia, Nokia Shanghai Bell, Qualcomm Incorporated, Ericsson, Xiaomi, ZTE, CATT)

**2.3.1.1.2 Support of Regenerative payload**

Agreements:

**Clarify the concerns mentioned in the incoming LS without any change on RAN3 previous agreements.**

Agreed TP:

* R3-250308 (TP for TS 38.300 BL CR) Stage 2 Corrections (Ericsson, Huawei, Nokia, Nokia Shanghai Bell, Thales, CATT, Qualcomm Incorporated, LG Electronics)

Agreed LS:

* R3-250895 Reply LS to SA2 and SA5 on OAM requirements to support regenerative payload transport links (CATT)
  + NG Setup procedure including the supported TAs is always expected to take place according to TS38.413.

#### 2.3.2 Remaining Open issues

**Support of regenerative payload:**

* Whether to make any enhancement to support RRC\_INACTIVE.
* Whether to support NG Suspend/Resume.
* Any Xn enhancements whether to exchange some information for location based CHO.
* Any issue left to feeder link switch (e.g. Path switch)

## 2.4 RAN4

#### 2.4.1 Agreements

2.4.1.1 Decisions during RAN4#113

**2.4.1.1.1 UE RF requirements**

Approved document

* R4-2502281 Way Forward for [114][310] NR\_NTN\_Ph3\_UE\_RF, Qualcomm

**2.4.1.1.2 SAN RF requirements**

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**2.4.1.1.3 RRM requirements**

Agreement:

* For SDT requirement in RRC\_INACTIVE state for (e)RedCap with NTN, TA validation based on the RSRP change criterion for RedCap in TN shall be removed and RAN4 can refer to the requirements on TA validation for the PUR requirements for IoT-NTN, that is,
  + Define the requirement based on *cg-SDT-timeAlignmentTimer* and valid values for and , specific approach can refer to the PUR requirements for IOT-NTN.

Agreement:

* For MDT requirements in RRC\_IDLE and RRC\_INACTIVE state,
  + Deprioritize to define Minimization of Drive Tests (MDT) requirements in RRC\_IDLE state and RRC\_INACTIVE state for (e)RedCap UE with FR1-NTN.

Agreement:

* From RAN4 requirement perspective, the requirements are applicable for up to 10.24s eDRX cycle, larger than 10.24s eDRX cycle cannot be applied for (e)RedCap UE with FR1-NTN.

Agreement:

For the relaxed criteria,

* Only ‘low mobility’ and ‘not at cell edge’ relaxation criteria defined for R17 NR NTN relaxations in GSO (corresponding to the TN R16 relaxation) will be supported from RAN4 requirement perspective.

For the thresholds of relaxation criterion,

* Existing thresholds defined for relaxed measurement in R17 NTN are re-used, and threshold value is up to network configuration.

Agreement: For the relaxation factor K,

* Reuse the parameters used in R17 NR NTN relaxations in GSO (corresponding to the TN R16 relaxation), which is 3 for UE only fulfill one of the relaxation criterion, and no requirement when both relaxation criterion are fulfilled for up to 1 hour.

Agreement:

* RAN4 to define measurement requirements in cell re-selection for inter-RAT (NTN to E-UTRAN TN) measurement in IDLE/INACITVE mode for (e)RedCap UE with FR1-NTN.

Agreement:

* Use new sections and section number with new suffix X in the specification to capture requirements for (e)RedCap UE with FR1-NTN bands.
* Utilize the reference method for the requirements that can be reused. FFS details.

Agreement:

* In RRC re-establishment requirements, update is needed to the TSMTC,i value for case where the SMTC for the inter-frequency carrier is not provided.

Approved documents

* R4-2502684 Ad-hoc minutes for NR\_NTN\_Ph3 WI, Qualcomm, CATT
* R4-2502604 WF on RRM requirements for NR\_NTN\_Ph3\_Part1, CATT
* R4-2502605 WF on RRM requirements for NR\_NTN\_Ph3\_Part2, Qualcomm

#### 2.4.2 Remaining Open issues

Definition of RF and RRM requirements enabling

* NR-NTN downlink coverage enhancement covering both GSO and NGSO constellations operating in FR1-NTN or FR2-NTN
* NR-NTN uplink capacity/throughput enhancement
* Support of regenerative payload
* Support of Rel-17 RedCap and Rel-18 eRedCap UEs with NR NTN operating in FR1-NTN bands

## 3. Detailed progress in SA/CT WGs since last TSG meeting (for all involved WGs)

NOTE: This section only needs to be filled in for WI/SIs where there is a corresponding relevant WI/SI in SA/CT.

## 3.1 SA2

#### 3.1.1 Agreements with cross-TSG impacts

#### 3.1.2 Remaining Open issues with cross-TSG impacts

NOTE: This section should also flag any critical dependencies that need TSG attention.   
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## 4. References

## 4.1 RAN1

**RAN1#120 meeting, Athens, February 17-21st, 2025:**

* R1-2501550 other Session notes for 9.11 (Non-Terrestrial Networks for NR Phase 3 and Internet of Things Phase 3) Ad-Hoc Chair (Huawei)
* R1-2501608 LS out Draft Reply LS on Ku band numerology Eutelsat Group
* R1-2501609 LS out Reply LS on Ku band numerology RAN1, Eutelsat Group
* R1-2500523 Work Plan Work plan WID: introduction of IoT-NTN TDD mode Iridium Satellite LLC
* R1-2500043 Work Plan Work plan for Rel-19 NR\_NTN\_Ph3 THALES
* R1-2500039 discussion FL Summary #1: NR-NTN downlink coverage enhancements THALES
* R1-2500040 discussion FL Summary #2: NR-NTN downlink coverage enhancements THALES
* R1-2500041 discussion FL Summary #3: NR-NTN downlink coverage enhancements THALES
* R1-2500042 discussion FL Summary #4: NR-NTN downlink coverage enhancements THALES
* R1-2500037 discussion NR NTN Downlink coverage enhancements THALES
* R1-2500182 discussion Discussion on NR-NTN downlink coverage enhancement Spreadtrum, UNISOC
* R1-2500082 discussion Discussion on downlink coverage enhancements for NR NTN Huawei, HiSilicon
* R1-2500109 discussion Discussions on downlink coverage enhancement for NR NTN Fraunhofer IIS, Fraunhofer HHI
* R1-2500301 discussion Discussion on NR-NTN DL coverage enhancement CMCC
* R1-2500268 discussion Discussion on NR NTN downlink coverage enhancement China Telecom
* R1-2500207 discussion Discussion on downlink coverage enhancement for NR NTN CATT
* R1-2500519 discussion Discussion on downlink coverage enhancement for NR NTN Baicells
* R1-2500501 discussion NR-NTN downlink coverage enhancement InterDigital, Inc.
* R1-2500607 discussion NR-NTN downlink coverage enhancement NEC
* R1-2500632 discussion Discussion on downlink coverage enhancements Fujitsu
* R1-2500443 discussion Discussion on NR-NTN downlink coverage enhancement OPPO
* R1-2500366 discussion Discussion on NR-NTN downlink coverage enhancement vivo
* R1-2500382 discussion Discussion on DL coverage enhancement for NR NTN ZTE Corporation, Sanechips
* R1-2500993 discussion Discussions on downlink coverage enhancements Nokia, Nokia Shanghai Bell
* R1-2501029 discussion NR-NTN downlink coverage enhancement MediaTek Inc.
* R1-2500983 discussion Discussion on NR-NTN downlink coverage enhancement TCL
* R1-2501280 discussion Discussion on Downlink Coverage Enhancements for NR NTN CEWiT
* R1-2501229 discussion Downlink Coverage Enhancement for NR NTN Google Korea LLC
* R1-2501216 discussion Discussion on DL coverage enhancement for NR-NTN NTT DOCOMO, INC.
* R1-2501114 discussion Discussion on NR-NTN downlink coverage enhancement HONOR
* R1-2501122 discussion Discussion on downlink coverage enhancement for NR-NTN CSCN
* R1-2500800 discussion NR-NTN Downlink Coverage Enhancement Apple
* R1-2500716 discussion Discussion on NR-NTN downlink coverage enhancement Xiaomi
* R1-2500672 discussion On NR-NTN downlink coverage enhancement Ericsson
* R1-2500866 discussion Discussion on downlink coverage enhancement for NR-NTN Samsung
* R1-2500919 discussion Discussion on NR-NTN downlink coverage enhancement ETRI
* R1-2500878 discussion Discussion on downlink coverage enhancements for NR NTN CCU
* R1-2500887 discussion Discussion on downlink coverage enhancement for NR NTN Lenovo
* R1-2501173 discussion Downlink coverage enhancement for NR NTN Qualcomm Incorporated
* R1-2500924 discussion NR-NTN Downlink Coverage Enhancement Panasonic
* R1-2501099 discussion Discussion on DL coverage enhancements for NR-NTN NICT
* R1-2501040 discussion Discussion on NR-NTN downlink coverage enhancement LG Electronics
* R1-2501041 discussion Discussion on support of (e)RedCap UEs with NR-NTN operating in FR1-NTN bands LG Electronics
* R1-2501062 discussion Support of (e)RedCap UEs with NR NTN Sharp
* R1-2501465 discussion Summary #1 for Support of RedCap and eRedCap UEs with NR NTN operating in FR1-NTN bands Moderator (CATT)
* R1-2501466 discussion Summary #2 for Support of RedCap and eRedCap UEs with NR NTN operating in FR1-NTN bands Moderator (CATT)
* R1-2501467 discussion Summary #3 for Support of RedCap and eRedCap UEs with NR NTN operating in FR1-NTN bands Moderator (CATT)
* R1-2501605 discussion Final Summary for Support of RedCap and eRedCap UEs with NR NTN operating in FR1-NTN bands Moderator (CATT)
* R1-2501174 discussion Support of Redcap and eRedcap UEs in NR NTN Qualcomm Incorporated
* R1-2500893 discussion Discussion on support of RedCap/eRedCap UEs in NTN CAICT
* R1-2500920 discussion Discussion on HD UEs with NR NTN ETRI
* R1-2500867 discussion Discussion on support of RedCap and eRedCap UEs with NR NTN operating in FR1-NTN bands Samsung
* R1-2500673 discussion On HD-FDD Redcap UEs for NTN Ericsson
* R1-2500717 discussion Discussion on the support of Redcap and eRedcap UEs in NR NTN Xiaomi
* R1-2500805 discussion Discussion on support of RedCap UEs with NR NTN operation Apple
* R1-2501115 discussion Discussion on support of (e)RedCap UEs in NR NTN HONOR
* R1-2501217 discussion Discussion on support of RedCap and eRedCap UEs in FR1-NTN NTT DOCOMO, INC.
* R1-2501261 discussion Support of RedCap and eRedCap UEs in NR NTN Nordic Semiconductor ASA
* R1-2500984 discussion Discussion on HD-FDD Redcap UEs and eRedcap UEs for FR1-NTN TCL
* R1-2501030 discussion Support of RedCap and eRedCap UEs with NR NTN operating in FR1-NTN bands MediaTek Inc.
* R1-2500994 discussion Discussion of support for RedCap and eRedCap UEs with NR NTN operating in FR1-NTN bands Nokia, Nokia Shanghai Bell
* R1-2500383 discussion Discussion on support of RedCap/eRedCap UEs for NR NTN ZTE Corporation, Sanechips
* R1-2500367 discussion Discussion on support of RedCap and eRedCap UEs with NR-NTN vivo
* R1-2500444 discussion Discussion on supporting of RedCap and eRedCap UEs with NR NTN operating in FR1-NTN bands OPPO
* R1-2500502 discussion Discussion on half-duplex RedCap issues for NTN FR1 operation InterDigital, Inc.
* R1-2500208 discussion Discussion on the enhancement of RedCap and eRedCap UEs In NTN CATT
* R1-2500269 discussion Discussion on Support of RedCap and eRedCap UEs with NR NTN operating in FR1-NTN bands China Telecom
* R1-2500302 discussion Discussion on the collision issues of HD-FDD Redcap UE in FR1-NTN CMCC
* R1-2500083 discussion Discussion on HD-FDD RedCap UEs and eRedCap UEs for FR1-NTN Huawei, HiSilicon
* R1-2500183 discussion Discussion on support of RedCap and eRedCap UEs with NR NTN operating in FR1-NTN bands Spreadtrum, UNISOC
* R1-2500184 discussion Discussion on NR-NTN uplink capacity/throughput enhancement Spreadtrum, UNISOC
* R1-2500084 discussion Discussion on uplink capacity/throughput enhancement for FR1-NTN Huawei, HiSilicon
* R1-2500303 discussion Discussion on the NR-NTN uplink capacity/throughput enhancements CMCC
* R1-2500270 discussion Discussion on NR-NTN uplink enhancement China Telecom
* R1-2500209 discussion Discussion on UL capacity enhancement for NR NTN CATT
* R1-2500503 discussion NR-NTN uplink capacity/throughput enhancement InterDigital, Inc.
* R1-2500633 discussion Discussion on uplink capacity/cell throughput enhancement for FR1-NTN Fujitsu
* R1-2500608 discussion NR-NTN uplink capacity/throughput enhancement NEC
* R1-2500445 discussion Discussion on NR-NTN uplink capacity/throughput enhancement OPPO
* R1-2500368 discussion Discussion on NR-NTN uplink capacity enhancement vivo
* R1-2500384 discussion Discussion on UL capacity enhancement for NR NTN ZTE Corporation, Sanechips
* R1-2500995 discussion Discussion of NR-NTN uplink capacity enhancements Nokia, Nokia Shanghai Bell
* R1-2501031 discussion NR-NTN uplink capacity and throughput enhancements MediaTek Inc.
* R1-2500987 discussion On uplink capacity/cell throughput enhancement for NR NTN Ericsson
* R1-2500980 discussion Discussion on the NR-NTN uplink capacity/throughput enhancements TCL
* R1-2501218 discussion Discussion on NR-NTN uplink capacity/throughput enhancement NTT DOCOMO, INC.
* R1-2501116 discussion Discussion on NR-NTN UL capacity/throughput enhancement HONOR
* R1-2501090 discussion Discussion on NR-NTN uplink capacity/throughput enhancement Hyundai Motor Company
* R1-2500801 discussion NR-NTN Uplink Capacity Enhancement Apple
* R1-2500718 discussion Discussion on NR-NTN PUSCH capacity enhancement Xiaomi
* R1-2500868 discussion Discussion on uplink capacity/throughput enhancement for NR-NTN Samsung
* R1-2500921 discussion Discussion on NR-NTN uplink capacity/throughput enhancement ETRI
* R1-2501175 discussion NR-NTN uplink capacity / throughput enhancement Qualcomm Incorporated
* R1-2500890 discussion Uplink capacity/throughput enhancement for NR-NTN Panasonic
* R1-2501051 discussion Discussion on NR-NTN uplink capacity/throughput enhancement Lenovo
* R1-2501042 discussion Discussion on NR-NTN uplink capacity/throughput enhancement LG Electronics
* R1-2501400 discussion Feature lead summary #1 of AI 9.11.3 on NR-NTN uplink capacity and throughput enhancements Moderator (MediaTek)
* R1-2501401 discussion Feature lead summary #2 of AI 9.11.3 on NR-NTN uplink capacity and throughput enhancements Moderator (MediaTek)
* R1-2501402 discussion Feature lead summary #3 of AI 9.11.3 on NR-NTN uplink capacity and throughput enhancements Moderator (MediaTek)
* R1-2501074 discussion IoT NTN OCC methods and signaling for NPUSCH and NPRACH Sharp
* R1-2501043 discussion Discussion on IoT-NTN uplink capacity/throughput enhancement LG Electronics
* R1-2501481 discussion Moderator Summary for response to LS on PWS Support for NB-IoT NTN UEs Moderator (InterDigital, Inc.)
* R1-2501517 LS out Draft reply LS on PWS support in RRC\_CONNECTED for NB-IoT NTN Moderator (InterDigital)
* R1-2501555 discussion Moderator Summary#2 for response to LS on PWS Support for NB-IoT NTN UEs Moderator (InterDigital, Inc.)
* R1-2501621 LS out [Draft] LS on TDM DMRS for 3.75kHz SCS OCC Moderator (Sony)
* R1-2501518 LS out Draft reply LS on PWS support in RRC\_CONNECTED for NB-IoT NTN Moderator (InterDigital)
* R1-2501612 LS out Draft reply LS on PWS support in RRC\_CONNECTED for NB-IoT NTN Moderator (InterDigital)
* R1-2501613 LS out Reply LS on PWS support in RRC\_CONNECTED for NB-IoT NTN RAN1, InterDigital
* R1-2501622 LS out LS on TDM DMRS for 3.75kHz SCS OCC RAN1, Sony
* R1-2501176 discussion IOT-NTN uplink capacity/throughput enhancement Qualcomm Incorporated
* R1-2500922 discussion Discussion on uplink capacity/throughput enhancement for IoT NTN ETRI
* R1-2500888 discussion Discussion on uplink capacity enhancement for IoT NTN Lenovo
* R1-2500869 discussion Discussion on uplink capacity/throughput enhancement for IoT-NTN Samsung
* R1-2500719 discussion Discussion on IoT-NTN uplink capacity enhancement Xiaomi
* R1-2500674 discussion On uplink capacity enhancements for IoT-NTN Ericsson
* R1-2500806 discussion Discussion on IoT-NTN Uplink Capacity Enhancement Apple
* R1-2501260 discussion IoT-NTN uplink capacity/throughput enhancement Nordic Semiconductor ASA
* R1-2500981 discussion Discussion on the IoT-NTN uplink capacity/throughput enhancements TCL
* R1-2501032 discussion IoT-NTN uplink capacity and throughput enhancement MediaTek Inc.
* R1-2500385 discussion Discussion on UL capacity enhancement for IoT NTN ZTE Corporation, Sanechips
* R1-2500369 discussion Discussion on IoT-NTN uplink capacity enhancement vivo
* R1-2500446 discussion Discussion on IoT-NTN uplink capacity/throughput enhancement OPPO
* R1-2500609 discussion IoT-NTN uplink capacity/throughput enhancement NEC
* R1-2500664 discussion On IoT-NTN uplink capacity enhancements Sony
* R1-2500665 discussion FL Summary #1 for IoT-NTN Moderator (Sony)
* R1-2500666 discussion FL Summary #2 for IoT-NTN Moderator (Sony)
* R1-2500667 discussion Final FL Summary for IoT-NTN Moderator (Sony)
* R1-2500504 discussion IoT-NTN uplink capacity/throughput enhancement InterDigital, Inc.
* R1-2500508 discussion IoT-NTN uplink capacity enhancement Nokia, Nokia Shanghai Bell
* R1-2500210 discussion Discussion on UL capacity enhancement for IoT NTN CATT
* R1-2500304 discussion Discussion on the IoT-NTN uplink capacity/throughput enhancements CMCC
* R1-2500085 discussion Discussion on UL capacity enhancements for IoT NTN Huawei, HiSilicon
* R1-2500185 discussion Discussion on IoT-NTN uplink capacity/throughput enhancement Spreadtrum, UNISOC
* R1-2500186 discussion Discussion on IoT-NTN TDD mode Spreadtrum, UNISOC
* R1-2500086 discussion Discussion on IoT-NTN TDD mode Huawei, HiSilicon
* R1-2500038 discussion Discussion on IoT-NTN TDD mode THALES
* R1-2500305 discussion Discussion on the new NB-IoT NTN TDD mode CMCC
* R1-2500211 discussion Physical layer design on IoT-NTN TDD mode CATT
* R1-2500509 discussion Discussion on IoT-NTN TDD mode Nokia, Nokia Shanghai Bell
* R1-2500524 discussion loT-NTN TDD mode scheduling, timing and channel decoding performance Iridium Satellite LLC
* R1-2500447 discussion Discussion on IoT-NTN TDD mode OPPO
* R1-2500370 discussion Discussion on IoT-NTN TDD mode vivo
* R1-2500386 discussion Discussion on the IoT-NTN TDD mode ZTE Corporation, Sanechips
* R1-2500982 discussion Discussion on the IoT-NTN TDD mode TCL
* R1-2501295 other On R19 TDD IoT-NTN Nordic Semiconductor ASA
* R1-2501219 discussion Discussion on IoT-NTN TDD mode NTT DOCOMO, INC.
* R1-2500807 discussion Discussion on IoT-NTN TDD mode Apple
* R1-2500720 discussion Discussion on IoT-NTN TDD mode Xiaomi
* R1-2500870 discussion Discussion on IoT-NTN TDD mode Samsung
* R1-2500889 discussion Discussion on IoT-NTN TDD mode Lenovo
* R1-2501177 discussion IOT-NTN TDD mode Qualcomm Incorporated
* R1-2501614 discussion Feature lead summary #3 on IoT-NTN TDD mode Moderator (Qualcomm Incorporated)
* R1-2501044 discussion Discussion on IoT-NTN TDD mode LG Electronics
* R1-2501075 discussion IoT NTN TDD frame structure and synchronization signal mapping Sharp
* R1-2501366 discussion Feature lead summary #1 on IoT-NTN TDD mode Moderator (Qualcomm Incorporated)
* R1-2501367 discussion Feature lead summary #2 on IoT-NTN TDD mode Moderator (Qualcomm Incorporated)

## 4.2 RAN2

**RAN2#129 meeting, Athens, February 17-21st, 2025:**

* R2-2501304 draftCR Running RRC CR for NR NTN phase 3 Ericsson
* R2-2501321 draftCR Introduction of NTN Ph3 enhancements THALES (Rapporteur)
* R2-2501284 CR Introduction of stage 2 for LTE TN to NR NTN idle mode mobility Samsung
* R2-2500529 CR Introduction of LTE TN to NR NTN IDLE mode mobility CATT
* R2-2500705 CR Introduction of LTE TN to NR NTN Mobility UE Capability vivo
* R2-2500703 discussion Discussion on simultaneous operation between GNSS and NR NTN Huawei, HiSilicon, Turkcell
* R2-2500584 discussion Discussion on simultaneous GNSS and NTN operations Apple
* R2-2500067 LS in Reply LS on Supporting MBS broadcast service for NR NTN (S2-2501329; contact: Xiaomi) SA2
* R2-2500045 LS in Reply LS on requirements for ETWS primary notification (S1-244857; contact: Novamint) SA1
* R2-2500100 discussion Discussion on DL coverage enhancement Xiaomi
* R2-2500219 discussion Discussion on Downlink Coverage Enhancement Samsung
* R2-2500582 discussion DL coverage enhancement in NTN Apple
* R2-2500575 discussion Further discussion of NR NTN coverage enhancement China Telecom
* R2-2500656 discussion Discussion on downlink coverage enhancement HONOR
* R2-2500615 discussion Cell barring and reselection for NTN DL-CE Lenovo
* R2-2500148 discussion Discussion on downlink coverage enhancement LG Electronics Inc.
* R2-2500459 discussion Discussion on DL coverage enhancement for NTN OPPO
* R2-2500532 discussion Default extended SSB periodicity Qualcomm Incorporated
* R2-2500749 discussion SMTC impacts due to NTN downlink coverage enhancements Sony
* R2-2500685 discussion Downlink coverage enhancement NEC
* R2-2500689 discussion Discussion on DL coverage enhancements Huawei, HiSilicon, Turkcell
* R2-2500524 discussion Further discussion on downlink coverage enhancements CATT
* R2-2500483 discussion Discussions on downlink coverage enhancement Fujitsu
* R2-2500727 discussion Discussion on NTN downlink coverage enhancement Nokia
* R2-2501010 discussion Discussion on SMTC for NTN DL coverage enhancements ITRI
* R2-2501037 discussion Analysis on DL coverage enhancements due to extended SIB periodicity CMCC
* R2-2501179 discussion Downlink coverage enhancement for non-terrestrial networks InterDigital Communications
* R2-2501182 discussion Discussion on Downlink Coverage Enhancements Sharp
* R2-2501290 discussion Downlink coverage enhancement SMTC impacts Sequans Communications
* R2-2501291 discussion Downlink coverage enhancement access control Sequans Communications
* R2-2501160 discussion Discussion on Downlink Coverage Enhancements CSCN
* R2-2501318 discussion DL coverage enhancements Ericsson
* R2-2501280 discussion Discussion on NR NTN Downlink Coverage Enhancements Rakuten Mobile, Inc
* R2-2501281 discussion RAN2 related proposals for Uplink Capacity & Throughput Enhancements Rakuten Mobile, Inc
* R2-2501032 discussion Discussion on uplink capacity/throughput enhancement for NR NTN CMCC
* R2-2500690 discussion Discussion on Uplink Capacity Enhancements Huawei, HiSilicon, Turkcell
* R2-2500770 discussion Consideration on DL CE and UL capacity enhancement ZTE Corporation, Sanechips
* R2-2500665 discussion UL Capacity enhancement for NRNTN NEC Corporation
* R2-2500675 discussion Remaining issues on the support of broadcast service in NTN ETRI
* R2-2500616 discussion Further considerations on broadcast service area information in NTN Lenovo
* R2-2500657 discussion Discussion on the support of broadcast service HONOR
* R2-2500576 discussion The mapping between service area information and MBS session China Telecom
* R2-2500583 discussion Discussion on broadcast serivce over NTN Apple
* R2-2500465 discussion Discussion on the support of broadcast service Xiaomi
* R2-2500530 discussion Signaling of MBS broadcast service area information Qualcomm Incorporated
* R2-2500453 discussion Discussion on providing MBS service area in NTN network OPPO
* R2-2500331 discussion Further Details on MBS in Rel-19 NR NTN Nokia, Nokia Shanghai Bell
* R2-2500220 discussion Discussion on Broadcast Service Area Samsung
* R2-2500252 discussion Discussion on Support of MBS Broadcast Service TCL
* R2-2500079 discussion Further Discussion on MBS Broadcast Service Area Provision in NTN vivo
* R2-2500080 discussion Discussion on MBS Broadcast Service Continuity in NTN vivo
* R2-2500771 discussion Consideration on broadcast service support ZTE Corporation, Sanechips
* R2-2500484 discussion Discussions on supporting broadcast service Fujitsu
* R2-2500523 discussion Further discussion on support of broadcast service in NR NTN CATT
* R2-2501033 discussion Considerations on broadcast service for NR NTN CMCC
* R2-2501005 discussion Discussion on MII procedure in NTN LG Electronics France
* R2-2500966 discussion Discussion on MBS broadcast over NTN Huawei, HiSilicon, Turkcell
* R2-2501180 discussion Support for broadcast service in non-terrestrial networks InterDigital Communications
* R2-2501181 discussion Remaining issues on intended service area Sharp
* R2-2501306 discussion Support for broadcast services in NR NTN Ericsson
* R2-2501097 discussion Discussion on the impact of regenerative payload ETRI
* R2-2501066 discussion Discussion on regenerative payload Fujitsu Limited
* R2-2500904 discussion Regenerative payload for NTN for NR Ph3 TOYOTA Info Technology Center
* R2-2500750 discussion Satellite switch with re-sync in regenerative payload Sony
* R2-2500617 discussion UE location verification in NTN regenerative architecture Lenovo

## 4.3 RAN3

**RAN3#127 meeting, Athens, February 17-21st, 2025:**

* R3-250052 CR (BL CR to 38.410) Introduce NG Removal procedure CMCC, Huawei, Nokia, Nokia Shanghai Bell, CATT, Ericsson, Qualcomm, Xiaomi, LG Electronics, China Telecom, Samsung, ZTE, NEC, ETRI
* R3-250053 draftCR (BL CR to 38.300) Support for Regenerative Payload and MBS broadcast in NR NTN Ericsson, Thales, Deutsche Telekom, Nokia, ESA, CATT, ZTE, Sateliot, Huawei, Dish Networks, Echostar, Eutelsat Group, Xiaomi, Samsung, CMCC, LG Electronics, NEC, Lenovo, ETRI
* R3-250054 CR Support for Regenerative Payload and MBS broadcast in NR NTN CATT, Thales, Nokia, Nokia Shanghai Bell, Ericsson, Huawei, ZTE, Qualcomm, Samsung, Xiaomi, CMCC, China Telecom, Jio, LG Electronics, NEC, ETRI, SES, ESA
* R3-250011 LS in Reply LS on supporting MBS broadcast service for NR NTN RAN2(Xiaomi)
* R3-250072 LS in Reply LS on Supporting MBS broadcast service for NR NTN SA2(Xiaomi)
* R3-250134 discussion Discussion on Support of MBS Broadcast Service TCL
* R3-250151 other (TP for TS 38.413) Support of broadcast service Xiaomi
* R3-250106 other (TP to BL CR for TS38.413) Support of MBS broadcast service for NR NTN CATT
* R3-250309 other Intended Service Area for MBS Broadcast Ericsson, Thales, Jio Platforms Limited, Intelsat
* R3-250334 other Support of MBS broadcast service for NTN China Telecom
* R3-250221 other (TP to BL CR for TS 38.300 and TS 38.413) Update on the support of MBS Broadcast Service Nokia, Nokia Shanghai Bell
* R3-250181 discussion (TP for TS 38.300 and TS 38.413) Discussion on NR NTN supporting MBS broadcast service NEC
* R3-250675 other (TP to 38.300) Discussion on Supporting MBS broadcast service for NR NTN CMCC
* R3-250400 other (TP for TS 38.300 and TS 38.413) Support MBS broadcast service Huawei, Qualcomm Incorporated
* R3-250501 other (TPs to BL CR 38.300 and 38.413) Discussion on NTN broadcast service supporting ZTE Corporation
* R3-250633 discussion Further discussion on support broadcast service for NR NTN Samsung
* R3-250634 discussion Further discussion on support of regenerative payload for NR NTN Samsung
* R3-250502 other (TPs to BL CR 38.410 and 38.413) Discussion on support of regenerative payload ZTE Corporation
* R3-250310 discussion Considerations on NG Interface Management over the Feeder Link Ericsson, Thales, Huawei, Jio Platforms Limited, Intelsat, ESA
* R3-250311 discussion Making the Case for Location-Based CHO in Rel-19 Ericsson, Thales, ESA, Inmarsat, Viasat, Jio Platforms Limited, Intelsat
* R3-250312 other Location-Based CHO in Rel-19 - XnAP Impacts Ericsson, Thales, ESA, Inmarsat, Viasat, Jio Platforms Limited, Intelsat
* R3-250401 other (TP for TS 38.300) Support of regenerative payload Huawei, Ericsson
* R3-250402 LS out [draft] Reply LS on OAM requirements to support regenerative payload Huawei
* R3-250313 discussion Additional Background on OAM Requirements and Regenerative Payload Ericsson
* R3-250314 discussion Inactive UEs and NR NTN Ericsson
* R3-250681 discussion Discussion on Support of regenerative payload for NR NTN CMCC
* R3-250648 discussion Discussions on INACTIVE support from moving satellite gNBs LG Electronics Inc.
* R3-250649 other (TP for NR\_NTN\_Ph3 TS 38.300 BL CR) OAM for NG management LG Electronics Inc.
* R3-250650 discussion Discussion on support of regenerative payload for NR NTN CSCN
* R3-250582 discussion NG Interface Management with NGAP Removal Jio Platforms JPL
* R3-250583 discussion Discussion on Support of Inactive UE in NTN ETRI, Ajou University
* R3-250182 discussion (TP for TS 38.300) Discussion on regenerative payload enhancement for NR NTN NEC
* R3-250222 other (TP to BL CR for TS 38.300) Discussion on the support of Regenerative payload Nokia, Nokia Shanghai Bell
* R3-250240 discussion Discussion on Reply LS on OAM requirements to support Regenerative payload Qualcomm Incorporated, Vodafone Group Plc, Vodafone Telekomünikasyon A.S.
* R3-250241 other (TP for TS 38.300) Discussion on NR NTN Regenerative Payload Qualcomm Incorporated, Nokia, Nokia Shanghai Bell, Xiaomi
* R3-250335 other Discussion on regenerative payload enhancement China Telecom
* R3-250350 discussion Discussion on regenerative NTN payload enhancement China Telecom
* R3-250351 other (TP for TS 38.300) Support of regenerative payload China Telecom
* R3-250308 other (TP for TS 38.300 BL CR) Stage 2 Corrections Ericsson, Huawei, Nokia, Nokia Shanghai Bell, Thales, CATT, Qualcomm Incorporated, LG Electronics
* R3-250107 other (TP to NTN BL CRs) Support of regenerative payload CATT
* R3-250152 discussion Support of Inactive UE mobility in NTN Xiaomi, Qualcomm Incorporated, Nokia, Nokia Shanghai Bell
* R3-250153 other (TP for TS 38.300) Support of regenerative payload Xiaomi
* R3-250133 discussion Discussion on Support of NTN Regenerative Architecture TCL
* R3-250030 LS in LS reply on OAM requirements to support regenerative payload SA5(CATT)
* R3-250023 LS in LS on reply to LS on OAM requirements to support regenerative payload SA2(Huawei)
* R3-250870 (TPs to BL CR 38.300 and 38.413) Discussion on NTN broadcast service supporting ZTE Corporation, Nokia, Nokia Shanghai Bell, Huawei, Qualcomm, CATT
* R3-250893 (TP for TS 38.300 and TS 38.413) Support MBS broadcast service Huawei, Nokia, Nokia Shanghai Bell, Qualcomm Incorporated, Ericsson, Xiaomi, ZTE, CATT
* R3-250308 (TP for TS 38.300 BL CR) Stage 2 Corrections Ericsson, Huawei, Nokia, Nokia Shanghai Bell, Thales, CATT, Qualcomm Incorporated, LG Electronics
* R3-250895 Reply LS to SA2 and SA5 on OAM requirements to support regenerative payload transport links To: SA2, SA5 (CATT)

## 4.4 RAN4

**RAN4#114 meeting, Athens, February 17-21st, 2025:**

* R4-2500414 draftCR Draft CR to TS 38.108: Introduction of regenerative payload NEC, THALES
* R4-2502283 draftCR Draft CR to TS 38.108: Introduction of regenerative payload NEC, THALES
* R4-2500319 other On NTN RedCap UE HD-FDD REFSENS Apple
* R4-2501003 other Discussion on RF requirements for NTN RedCap UE CATT
* R4-2501080 discussion Disscussion on NTN (e)Redcap UE RF requirements Spreadtrum,UNISOC
* R4-2501158 discussion REFSENS for NTN Redcap and eRedcap Sony
* R4-2502103 other RedCap UE RF impact on HD-FDD Ericsson
* R4-2502013 other NR NTN RedCap UE RF requirements Qualcomm Inc.
* R4-2501727 discussion Discussion on Rel-19 NR-NTN RedCap UE RF requirements MediaTek (Hefei) Inc.
* R4-2501322 discussion Views on increasing MOP tolerance for NTN HD-FDD Redcap NTT DOCOMO INC.
* R4-2501382 other RedCap NTN UEs Nokia
* R4-2501477 discussion Discussion on RedCap UE RF requirements with NR NTN operating in FR1-NTN bands OPPO
* R4-2501450 other Discussion on the remaining issues for NR NTN phase 3 Huawei, HiSilicon
* R4-2502012 other NR NTN UL Capacity Enhancements Qualcomm Inc.
* R4-2502104 other Other NTN UE RF impact Ericsson, Sony
* R4-2500086 draftCR Draft CR to TS 38.108: Introduction of regenerative payload NEC Europe Ltd
* R4-2500239 discussion On R19 NTN (e)RedCap RRM requirements Apple
* R4-2500390 discussion Discussion on NTN (e)Redcap RRM requirements MediaTek inc.
* R4-2501130 other Discussion on (e)RedCap RRM requirements of R19 NR NTN OPPO
* R4-2501174 other Discussion on RRM requirements for RedCap NTN ZTECorporation,Sanechips
* R4-2501023 discussion Discussion on (e)RedCap RRM requirements for Rel-19 NTN phase3 CATT
* R4-2500852 discussion Discussion on the RRM requirement for Redcap over NTN CMCC
* R4-2500895 discussion Discussion on RRM requirements for (e)RedCap in NTN LG Electronics Inc.
* R4-2500631 discussion Discussion on (e)RedCap RRM requirements in NTN for NR Phase 3 Xiaomi
* R4-2502225 discussion (NR\_NTN\_Ph3-Core) RedCap for NTN Qualcomm Incorporated
* R4-2501466 discussion Discussion on RRM requirements of RedCap in Rel-19 NTN phase 3 Samsung
* R4-2501486 discussion Discussing requirements for RedCap support in NR NTN Nokia
* R4-2501342 discussion Discussion on RRM requirements on (e)RedCap for R19 NR NTN Phase 3 vivo
* R4-2501287 discussion Discussion on RedCap RRM requirements for NTN for NR Phase 3 Ericsson
* R4-2501269 discussion Discussion on RRM requirements for RedCap UE in NTN Huawei, HiSilicon
* R4-2501270 discussion Discussion on other RRM requirements for Rel-19 NTN Huawei, HiSilicon
* R4-2501288 discussion Discussion on other RRM requirements for NTN for NR Phase 3 Ericsson
* R4-2501343 discussion Discussion on RRM impacts on DL coverage for R19 NR NTN Phase 3 vivo
* R4-2501487 discussion On the impact of extended SSB periodicity on the main NTN cell Nokia
* R4-2501467 discussion Discussion on RRM requirements of other aspects in Rel-19 NTN phase 3 Samsung
* R4-2502226 discussion (NR\_NTN\_Ph3-Core) Downlink coverage enhancement for NTN Qualcomm Incorporated
* R4-2500632 discussion Discussion on other RRM core requirements in NTN for NR Phase 3 Xiaomi
* R4-2500898 discussion Discussion on RRM requirements for downlink coverage enhancement in NTN LG Electronics Inc.
* R4-2500853 discussion Discussion on the RRM requirement for NTN phase3 CMCC
* R4-2501024 discussion Discussion on other RRM requirements for Rel-19 NTN phase3 CATT
* R4-2501131 other Discussion on other RRM requirements of R19 NR NTN OPPO
* R4-2500391 discussion Discussion on NTN RRM requirements for SSB periodicity up to 160ms MediaTek inc.
* R4-2500240 discussion On R19 other NTN RRM requirements Apple
* R4-2500543 other Topic summary for [114][229] NR\_NTN\_Ph3\_Part1 Moderator (CATT)
* R4-2500544 other Topic summary for [114][230] NR\_NTN\_Ph3\_Part2 Moderator (Qualcomm)
* R4-2500570 other Topic summary for [114][309] NR\_NTN\_Ph3\_General\_SAN\_RF Moderator (Thales)
* R4-2500571 other Topic summary for [114][310] NR\_NTN\_Ph3\_UE\_RF Moderator (Qualcomm)
* R4-2502604 other WF on RRM requirements for NR\_NTN\_Ph3\_Part1 CATT
* R4-2502605 other WF on RRM requirements for NR\_NTN\_Ph3\_Part2 Qualcomm
* R4-2502281 other Way Forward for [114][310] NR\_NTN\_Ph3\_UE\_RF Qualcomm
* R4-2502684 other Ad-hoc minutes for [NR\_NTN\_Ph3-Core] WI Qualcomm Incorporated, CATT

***END***