**3GPP T****SG-RAN WG4 Meeting#110 R4-2401103**

**Athens, 26th Feb – 1st March, 2024**

**Agenda item:** 13

**Source:** Moderator(Nokia)

**Title:** Topic summary for [110][144] Release\_indep

**Document for:** Information

# Introduction

*Briefly introduce background, the scope of this email discussion (e.g. list of treated agenda items) and provide some guidelines for email discussion if necessary.*

# Topic #1: General enhancements

*Main technical topic overview. The structure can be done based on sub-agenda basis.*

## Companies’ contributions summary

|  |  |  |  |
| --- | --- | --- | --- |
| **T-doc number** | **Title** | **Company** | **Proposals / Observations** |
| [**R4-2400054**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2400054.zip) | Discussion on release independent specification improvement | CATT | **Proposal 1: Option 3 in Table 1 is agreed for E-UTRA and NR RAN4 release independent spec approach, i.e. TS 36.307 and TS 38.307 are maintained for the latest release, the earlier release specs are formally closed.**  **Proposal 2: Approve general improvement directions for R18 TS 38.307 and R18 TS 36.307 in this meeting for the discussion in next meeting.**  **Proposal 3: All earlier releases 307 specs are formally closed and point to R18 spec. When R19 spec is available, R18 spec points to R19.**  **Issue 1-1: Which releases of 307s are modified when new feature is introduced**  Option 1: Only the latest 307s  **Issue 1-2: If only latest release is updated what to do with earlier releases**  Option 1: All earlier releases 307 specs are formally closed and point to R18 spec. When R19 spec is available, R18 spec points to R19. |
| [**R4-2400055**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2400055.zip) | Draft Improvement CR for TS 38.307 R18 | CATT | Various improvements, wait conclusion on Issues in section 1.  **Issue 1-3: Release pointers**  Option 1: R4-2400055 remove all release pointers from text and replace those with general sentence in section 4  **Issue 1-5: 2. Remove “Additional”.**  Option 1: Remove word additional from headers R4-2400056 |
| [**R4-2400056**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2400056.zip) | Draft Improvement CR for TS 36.307 R18 | CATT | Various improvements. Wait conclusion on R18 NR and harmonize |
| [**R4-2400057**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2400057.zip) | Draft CR for TS 38.307 R15 formally closed | CATT | Various improvements. Wait conclusion on R18 NR and harmonize |
| [**R4-2400058**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2400058.zip) | Draft CR for TS 36.307 R8 formally closed | CATT | Various improvements. Wait conclusion on R18 NR and harmonize |
| [**R4-2400608**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2400608.zip) | discussion on release independence specs 38.307 and 36.307 | Nokia, CHTTL, Samsung | **Issue 1-3: Release pointers**  Option 2: R4-2400608 replace all release pointers with Rel-P in Rel-18 spec.   * P     Represent the present release of this specification. |
| [**R4-2400609**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2400609.zip) | CR for 36.307 General enhancement for future proofing R18 | Nokia, CHTTL, Samsung | Introduciton of Rel-P |
| [**R4-2400610**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2400610.zip) | CR for 38.307 General enhancement for future purposes R18 | Nokia, CHTTL, Samsung | Introduciton of Rel-P |
| [**R4-2401988**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2401988.zip) | Discussion on the updated procedure for introducing release independent features | CHTTL, Nokia | **Issue 1-1: Which releases of 307s are modified when new feature is introduced**  Option 3: -When a new feature is introduced only the latest release of release independent spec needs to be updated. The latest release of release independent spec refers to release N, aligned with the release of the related WI (i.e. for the non-category A CR, the <Release> shall be aligned with the <Related\_WIs> mentioned on the CR cover page).  **Issue 1-4: Introduction of Annexes**  Option 1: RAN4 to discuss to simplify the procedure of introducing the common UE RF requirements table from Rel.18 by removing the following rule.   * If an RF feature introduced in the same release as the release which the feature is independent from, (i.e. M=N), the common UE RF requirements table in annex B.4 is specified from release N+1. |
| [**R4-2401989**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2401989.zip) | [TEI18] CR to 38.307 for updated procedure for introducing release independent features | CHTTL, Nokia | Wait conclusion on Issues in section 1. |
| [**R4-2401990**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2401990.zip) | [TEI18] CR to 36.307 for updated procedure for introducing release independent features | CHTTL, Nokia | Wait conclusion on Issues in section 1. |

## Open issues summary

*Before Meeting, moderators shall summarize list of open issues, candidate options and possible WF (if applicable) based on companies’ contributions.*

#### Issue 1-1: Which releases of 307s are modified when new feature is introduced

* Proposals
  + Option 1: Only the latest 307s
  + Option 2: Also earlier releases of 307s starting from release from which the feature is release independent
  + Option 3: -When a new feature is introduced only the latest release of release independent spec needs to be updated. The latest release of release independent spec refers to release N, aligned with the release of the related WI (i.e. for the non-category A CR, the <Release> shall be aligned with the <Related\_WIs> mentioned on the CR cover page).
* Recommended WF
  + Option 1 and 3:

#### Issue 1-2: If only latest release is updated what to do with earlier releases

* Proposals
  + Option 1: All earlier releases 307 specs are formally closed and point to R18 spec. When R19 spec is available, R18 spec points to R19.
  + Option 2: All earlier releases 307 specs are formally not closed but no CAT-B CRs are allowed
* Recommended WF
  + Discuss further but option 2 does not need formal actions from ETSI

#### Issue 1-3: Release pointers

* Proposals
  + Option 1: R4-2400055 remove all release pointers from text and replace those with general sentence in section 4
  + Option 2: R4-2400608 replace all release pointers with Rel-P in Rel-18 spec.
    - P     Represent the present release of this specification.
  + Option 3: Keep pointers as in current specifications but correct Rel-18 pointers.
* Recommended WF
  + TBA

#### Issue 1-4: Introduction of Annexes

* Proposals
  + Option 1: RAN4 to discuss to simplify the procedure of introducing the common UE RF requirements table from Rel.18 by removing the following rule.
    - If an RF feature introduced in the same release as the release which the feature is independent from, (i.e. M=N), the common UE RF requirements table in annex B.4 is specified from release N+1.
  + Option 2: Do not remove the rule as proposed in option 1. Annexes are introduced in N+1 release
* Recommended WF
  + Option 1

#### Issue 1-5: 2. Remove “Additional”.

* Proposals
  + Option 1: Remove word additional from headers R4-2400056
  + Option 2: Keep word additional
* Recommended WF
  + TBA

# Topic #2: Maintenance

*Main technical topic overview. The structure can be done based on sub-agenda basis.*

## Companies’ contributions summary

|  |  |  |  |
| --- | --- | --- | --- |
| **T-doc number** | **Title** | **Company** | **Proposals / Observations** |
| [**R4-2402066**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2402066.zip) | (maintenance 38.307) Discussion on potential optimization on TS 38.307 draft rules | Huawei, HiSilicon | **Issue 2-1: Scope modification**  Option 1: Add NOTE: When a REL-independent approach is considered, in the corresponding RAN4 WID decided by TSG RAN, the release independent objective should be mentioned and it should be clarified which release this release independent approach is used from.  **Issue 2-2: Clause 4 modification**  Option 1: Improve the wordings in the last part of clause 4 general from TS 38.307 as in R4-2402066 proposal 2.  **Issue 2-2: Clause 4 clarification**  Option 1: it’s proposed to introduce the following clarification in the clause 4 general of TS 38.307  If the REL-independent requirement is a Core part requirement, then the REL-independent spec is impacted by the Core part. If the REL-independent requirement is a Perf. part requirement, then the REL-independent spec is impacted by the Perf. part. |
| [**R4-2402067**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2402067.zip) | (maintenance 38.307) draft CR for TS 38.307 to improve the wordings for draft rules | Huawei, HiSilicon | Wait conclusion on Issues in section 1 |
| [**R4-2401246**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2401246.zip) | (NR\_CADC\_R16\_2BDL\_xBUL-Core) CR for TS38.307: Update and correct the requirements for inter-band NR-DC configurations | ZTE Corporation, Samsung, CHTTL | R16 NR interband CA/DC updates |
| [**R4-2401247**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2401247.zip) | (NR\_CADC\_R17\_2BDL\_xBUL-Core) CR for TS38.307: Update and correct the requirements for inter-band NR-DC configurations | ZTE Corporation, Samsung, CHTTL | R17 NR interband CA/DC updates |
| [**R4-2401248**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2401248.zip) | (NR\_CADC\_R18\_2BDL\_xBUL-Core) CR for TS38.307: Update and correct the requirements for inter-band NR-DC configurations | ZTE Corporation, Samsung, CHTTL | R18 NR interband CA/DC updates |
| **[R4-2400611](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2400611.zip)** | CR for 38.307 necessary fixes for release pointers R17 | Nokia, CHTTL, Samsung | R17 corrections for release pointers |
| **[R4-2400612](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2400612.zip)** | CR for 38.307 necessary fix for release pointer R16 | Nokia, CHTTL, Samsung | R16 corrections for release pointers |
| **[R4-2402359](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2402359.zip)** | (NR\_CA\_R16\_intra-Core) Rel-16 Cat F CR for 38.307 Correct and update the requirements for EN-DC and NR-CA | Samsung, Nokia, ZTE Corporation, Huawei, HiSilicon, CHTTL | R16 NR intraband CA/DC updates |
| [**R4-2402360**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2402360.zip) | (NR\_CA\_R17\_Intra-Core) Rel-17 Cat F CR for 38.307 Correct and update the requirements for EN-DC and NR-CA | Samsung, Nokia, ZTE Corporation, Huawei, HiSilicon, CHTTL | R17 NR intraband CA/DC updates |
| [**R4-2402361**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2402361.zip) | (NR\_CA\_R18\_Intra-Core) Rel-18 Cat F CR for 38.307 Correct and update the requirements for EN-DC and NR-CA | Samsung, Nokia, ZTE Corporation, Huawei, HiSilicon, CHTTL | R18 NR intraband CA/DC updates |
| [**R4-2402069**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2402069.zip) | CR to TS 38.307 on release independence for intra-band NE-DC contiguous configurations | CHTTL | A new intra-band contiguous NE-DC combination, DC\_(n)3AA with PC3 and with single switched UL support only, had been first introduced in the Rel.18 38.101-3 specification, however, the release independent issue was not yet addressed. |

## Open issues summary

#### Issue 2-1: Scope modification

* Proposals
  + Option 1: Add NOTE: When a REL-independent approach is considered, in the corresponding RAN4 WID decided by TSG RAN, the release independent objective should be mentioned and it should be clarified which release this release independent approach is used from.
  + Option 2: Do not add proposed note.
* Recommended WF
  + TBA

#### Issue 2-2: Clause 4 modification

* Proposals
  + Option 1: Improve the wordings in the last part of clause 4 general from TS 38.307 as in R4-2402066 proposal 2.
  + Option 2: Do not change
* Recommended WF
  + TBA

#### Issue 2-3: Clause 4 clarification

* Proposals
  + Option 1: it’s proposed to introduce the following clarification in the clause 4 general of TS 38.307
    - If the REL-independent requirement is a Core part requirement, then the REL-independent spec is impacted by the Core part. If the REL-independent requirement is a Perf. part requirement, then the REL-independent spec is impacted by the Perf. part.
  + Option 2: Do not add
* Recommended WF
  + TBA

#### Issue 2-4: R4-2401246 (NR\_CADC\_R16\_2BDL\_xBUL-Core) CR for TS38.307: Update and correct the requirements for inter-band NR-DC configurations

* Proposals
  + Option 1: agree
  + Option 2: revise
  + Option 3: post pone
* Recommended WF
  + Option 1: agree

#### Issue 2-5: R4-2401247 (NR\_CADC\_R17\_2BDL\_xBUL-Core) CR for TS38.307: Update and correct the requirements for inter-band NR-DC configurations

* Proposals
  + Option 1: agree
  + Option 2: revise
  + Option 3: post pone
* Recommended WF
  + Option 1: agree

#### Issue 2-6: R4-2401248 (NR\_CADC\_R18\_2BDL\_xBUL-Core) CR for TS38.307: Update and correct the requirements for inter-band NR-DC configurations

* Proposals
  + Option 1: agree
  + Option 2: revise
  + Option 3: post pone
* Recommended WF
  + Option 1: agree

#### Issue 2-7: R4-2400611 CR for 38.307 necessary fixes for release pointers R17

* Proposals
  + Option 1: agree
  + Option 2: revise
  + Option 3: post pone
* Recommended WF
  + Option 1: agree

#### Issue 2-8: R4-2400612 CR for 38.307 necessary fix for release pointer R16

* Proposals
  + Option 1: agree
  + Option 2: revise
  + Option 3: post pone
* Recommended WF
  + Option 1: agree

#### Issue 2-9: R4-2402359 (NR\_CADC\_R18\_2BDL\_xBUL-Core) CR for TS38.307: Update and correct the requirements for inter-band NR-DC configurations

* Proposals
  + Option 1: agree
  + Option 2: revise
  + Option 3: post pone
* Recommended WF
  + Option 1: agree

#### Issue 2-10: R4-2402360 (NR\_CA\_R17\_Intra-Core) Rel-17 Cat F CR for 38.307 Correct and update the requirements for EN-DC and NR-CA

* Proposals
  + Option 1: agree
  + Option 2: revise
  + Option 3: post pone
* Recommended WF
  + Option 1: agree

#### Issue 2-11: R4-2402361 (NR\_CA\_R18\_Intra-Core) Rel-18 Cat F CR for 38.307 Correct and update the requirements for EN-DC and NR-CA

* Proposals
  + Option 1: agree
  + Option 2: revise
  + Option 3: post pone
* Recommended WF
  + Option 1: agree

# Topic #3: NTN

*Main technical topic overview. The structure can be done based on sub-agenda basis.*

## Companies’ contributions summary

|  |  |  |  |
| --- | --- | --- | --- |
| **T-doc number** | **Title** | **Company** | **Proposals / Observations** |
| [**R4-2400220**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2400220.zip) | (NR\_NTN\_LSband-Core) CR on TS 38.307 for NR NTN bands release independent, Rel-18 | Qualcomm Incorporated, CHTTL | Introduce annexes for common NR NTN RF, RRM and Demodulation requirements |
| [**R4-2400221**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2400221.zip) | (NR\_NTN\_solutions-Core) CR on TS 38.307 for NR NTN bands release independent, Rel-17 | Qualcomm Incorporated, CHTTL | CR to TS 38.307: release independent requirements for NTN FR1, Rel-17 was agreed in R4-2321953 in RAN4#109. It was agreed not to introudce Annex for common reuqiremtens in Rel-17 TS 38.307. Hence the content of the last column in the Table 9.1-1 should be deleted.  Added FR1 in the title of section 9 to distinguish from FR2 features. |
| [**R4-2400613**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_110/Docs/R4-2400613.zip) | CR for 36.307 Removal of Rel18 NTN from Rel17 spec | Nokia, CHTTL, Qualcomm | Release 18 WI LTE\_NBIOT\_eMTC\_NTN\_req modified also Release 17 specification. This is againts current procedure that only latest version of release independece specification is updated. |

## Open issues summary

*Before Meeting, moderators shall summarize list of open issues, candidate options and possible WF (if applicable) based on companies’ contributions.*

#### Issue 3-1: R4-2400220

* Proposals
  + Option 1: agree
  + Option 2: revise
  + Option 3: post pone
* Recommended WF
  + Option 1: agree

#### Issue 3-2: R4-2400221

* Proposals
  + Option 1: agree
  + Option 2: revise
  + Option 3: post pone
* Recommended WF
  + Option 1: agree

#### Issue 3-3: R4-2400613

* Proposals
  + Option 1: agree
  + Option 2: revise
  + Option 3: post pone
* Recommended WF
  + Option 1: agree