**3GPP TSG-RAN WG4 Meeting #109 R4-2318128**

**Chicago, USA, November 13 – November 17, 2023**

**Agenda item:** 9.5.4

**Source:** Moderator (AT&T)

**Title:** Topic summary for [109][122] HPUE\_LTE\_FDD\_B14

**Document for:** Information

# Introduction

This document summarizes the contributions submitted under agenda item 9.5. The topics that are covered include maximum output power and tolerance and release independence of band 14 PC2 UE. This topic summary has focused on the items requiring discussion. Any endorsement/approval of DraftCRs/TPs will be handled online.

# Topic #1: Maximum Output Power and Tolerance

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2318090 | AT&T, FirstNet | Proposal: A text proposal for TP for TR 36.770 to add content to the UE maximum output power clause which proposes an MOP tolerance of +/- 2dB and no need for the extra relaxation on the band edge. The proposed tolerance is inline with other single Tx MOP tolerances for PC2 in LTE core specification. |
| R4-2319028 | vivo | Proposal 1: The maximum out power and tolerance of PC2 UE in band 14 is proposed to follow legacy PC2 RF requirement, and the tolerance of PC2 for band 14 is +2/-3.  Proposal 2: For band 14, the extra relaxation on the band edge is not needed.  Proposal 3: The following text for 36.101 clause 6.2.2 is proposed:  “For a power class 2 capable UE operating on Band 14, when an IE P-max as defined in TS 36.331 [7] of 23 dBm or lower is indicated in the cell, the corresponding requirements for a power class 3 UE shall apply.”  Proposal 4: The configured transmitted power for PC 1 on band 14 is only restricted by the P-max, no update is needed for PC2 on band 14.  Proposal 5: To keep UTRAACLR consistent between LTE and NR, UTRAACLR is not applicable to power class 1/2/3 UE operating in Band 14. |

## Open issues summary

### Sub-topic 1-1

**Issue 1-1: Maximum output power tolerance**

* Proposals
  + Option 1: Maximum output power tolerance of +/-2 dB.
  + Option 2: Maximum output power tolerance of +2/-3 dB.
* Recommended WF
  + TBA

### Sub-topic 1-2

**Issue 1-2: Band edge relaxation**

* Proposals
  + Option 1: Extra relaxation on the band edge is not needed.
  + Option 2: Others.
* Recommended WF
  + Option 1

### Sub-topic 1-3

**Issue 1-3: 36.101 clause 6.2.2 update**

* Proposals
  + Option 1: Add the following text to clause 6.2.2; “For a power class 2 capable UE operating on Band 14, when an IE P-max as defined in TS 36.331 [7] of 23 dBm or lower is indicated in the cell, the corresponding requirements for a power class 3 UE shall apply.”
  + Option 2: No need to update the text for clause 6.2.2 as the Band 14 P-max handling is already covered by the following text and subsequent decision tree; “For each supported frequency band other than Band 14 and Band 41, the UE shall…”.
* Recommended WF
  + Option 2

### Sub-topic 1-4

**Issue 1-4: Configured transmitted power**

* Proposals
  + Option 1: No update needed to configured transmitted power clause for Band 14 PC2.
  + Option 2: Others.
* Recommended WF
  + Option 1

### Sub-topic 1-5

**Issue 1-5: UTRA ACLR**

* Proposals
  + Option 1: UTRAACLR is not applicable to power class 1/2/3 UE operating in Band 14.
  + Option 2: Others.
* Recommended WF
  + Option 1

# Topic #2: Release independence of band 14 PC2 UE

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2319030 | vivo | Proposal: Power class 2 UE on band 14 is proposed as release independency from release 10. |

## Open issues summary

### Sub-topic 2-1

**Issue 2-1: Release independence of band 14 PC2 UE**

* Proposals
  + Option 1: Band 14 PC2 UE is release independent from Release 10.
  + Option 2: Others.
* Recommended WF
  + Option 1.