**3GPP TSG RAN WG1 Meeting #110bis-e R1-22xxxxx**

**e-Meeting, October 10th – 19th, 2022**

**Agenda item:** 7.2

**Source:** Moderator (Sharp)

**Title:** Summary of [110bis-e-NR-R16-08] Discussion on the definition of defer duration and conditions of new back-off

**WI:** NR\_unlic-Core

**Document for:** Discussion and Decision

# Introduction

This document is a summary of the following email discussion,

[110bis-e-NR-R16-08] Discussion on the definition of defer duration and conditions of new back-off by Oct 14 – TBD (Sharp)

# Summary of inputs in relation to [110bis-e-NR-R16-08]

## RAN1#110

The following was agreed in RAN1#110 meeting, see [1],

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| Agreement* TP#2, TP#3, TP#4 and TP#5 in R1-2007919 are endorsed in principle and provided to the specification editors for their next update of the Rel-16 and Rel-17 specifications.
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As per decision for email discussion [Post-110-AlignmentCR-37.213], R1-2208306 [2] from the Editor of TS 37.213 (capturing TP#3 and TP#5 in R1-2007919 [3]) was agreed.

During email discussion [Post-110-AlignmentCR-37.213], some concerns were raised on TP#2 in R1-2007919 [3] (reproduced below for convenience).

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| TP#2 for TS 37.213

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| **<Unchanged parts are omitted>**4.1.1 Type 1 DL channel access procedures**<Unchanged parts are omitted>**The defer duration $T\_{d}$ consists of duration $T\_{f}=16us$ immediately followed by $m\_{p}$ consecutive sensing slot durations $T\_{sl}$, and $T\_{f}$ includes a sensing slot duration $T\_{sl}$ at start of $T\_{f}$. **<Unchanged parts are omitted>** |

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## RAN1#110bis-e

R1-2209800 [4] was submitted to RAN1#110bis-e, where the following observations and proposal in relation to TP#2 in R1-2007919 [3] were made,

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| ***Observation 1:*** *The definition of “defer duration” has been implemented in accordance with RAN1 agreements in both TS 36.213 and TS 37.213.****Observation 2:*** *The intention of the sentence “if the channel has been sensed to be not idle during any of the sensing slot durations of a defer duration* $T\_{d}$*” in clause 4.1.1 of TS 37.213 was as follows,** *“the channel has to be continuously idle for at least initial defer duration immediately before the transmission”*.

***Proposal:*** *Capture Observation 2 in R1-2209800 as a conclusion in Chair’s note.* |

# Discussion

## Round 1

### The case of no sensing slot being idle in a defer duration

As pointed out in R1-2209800 [4], there is a sentence in clause 4.1.1 of TS 37.213 (*“if the channel has been sensed to be not idle during any of the sensing slot durations of a defer duration* $T\_{d}$*”*) that seems to conflict with the definition of defer duration, i.e.

* On one hand, by definition, a defer duration always starts with an idle sensing slot;
* On the other hand, if the condition “*the channel has been sensed to be not idle during any of the sensing slot durations of a defer duration* $T\_{d}$” is satisfied, then there is no idle sensing slot in the corresponding defer duration.

In R1-2209800 [4], it was proposed to conclude in RAN1 that the actual intention of the above mentioned sentence in clause 4.1.1 of TS 37.213 was that “*the channel has to be continuously idle for at least initial defer duration immediately before the transmission*”, see Observation 2 in R1-2209800 [4].

#### Q1: Do you agree to capture Observation 2 in R1-2209800 as a conclusion in RAN1#110bis-e chair’s notes?

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| **Company** | **Answer (Yes/No)** | **Comment** |
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### Other issues (if any)

#### Q2: If you think there is any other issue(s) that should be discussed as part of [110bis-e-NR-R16-08], please specify. Otherwise please skip this question.

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| **Company** | **Comment** |
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# Summary

[TBD]

# References

1. RAN1#110 Chairman’s notes.
2. R1-2208306, “Rel-16 editorial corrections for TS 37.213”, Ericsson, RAN1#110.
3. R1-2207919, “Summary of comments on R1-2206935 miscellaneous corrections”, Moderator (Sharp), RAN1#110.
4. R1-2209800, “On definition of defer duration and conditions of new back-off”, Sharp, Ericsson, RAN1#110bis-e.
5. R1-2206935, “Miscellaneous corrections to TS 37.213”, Sharp, RAN1#110.