3GPP TSG-RAN WG1 Meeting #110 R1-20xxxxx

Toulouse, France, August 22nd – 26th, 2022

Agenda Item: 6

Source: Moderator (Ericsson)

Title: Moderator Summary [110-LTE-Maintenance] on Missing DCI Formats

Document for: Discussion and Decision

# 1 Introduction

In [1], a discussion paper on “Missing DCI formats when mapping ACKNACK resource offset field” was submitted accompanied with its corresponding DRAFT CR [2].

This Moderator Summary on “[110-LTE-Maintenance] on Missing DCI Formats” aims at collecting views on [1] and [2] as per the instructions below:

|  |
| --- |
| * For agenda items 6, 7.1, 7.2.X, I would like to request the proponent companies to collect company views using the draft folder

...* Feel free to announce that your tdoc summaries are available after Thursday 23:59 UTC using either [110-LTE-Maintenance], [110-R15-NR], or [110-R16-NR] which I will kick off in a day or so.

[110-LTE-Maintenance] To be used for sharing updates on online/offline schedule, details on what is to be discussed in online/offline sessions, tdoc number of the moderator summary for online session, etc – RAN1 ChairModerators, please feel free to announce the availability of tdoc summaries or request company inputs to the draft folder. Companies are requested to provide initial inputs by Monday (Aug 22) 15:00 (in France). |

In the following sections a background according to [1] and [2] is provided, and afterwards there is a section to collect companies’ views.

# 2 Background: Missing DCI formats when mapping ACK/NACK resource offset field

In [1] it was mentioned:

“In TS 36.213 [1], Table 10.1.2.1-1 is used when mapping ACK/NACK “Resource offset Field” in DCI format 1A/1B/1D/1/2A/2/2B/2C/2D/6-1A/6-1B to ΔARO values. However, DCI Formats 6-1A and 6-1B are only readable from the title of Table 10.1.2.1-1 whereas they are missing into the contents of the actual table”.

The missing DCI formats in Table 10.1.2.1-1 are proposed to be incorporated as follows [1]:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ------------------------------------------------------- Text Start ------------------------------------------------------------10.1.2.1 FDD HARQ-ACK procedure for one configured serving cell------------------------------------------------------- Text Omitted --------------------------------------------------------Table 10.1.2.1-1: Mapping of ACK/NACK Resource offset Field in DCI format 1A/1B/1D/1/2A/2/2B/2C/2D/6-1A/6-1B to values

|  |  |
| --- | --- |
| ACK/NACK Resource offset field in DCI format 1A/1B/1D/1/2A/2/2B/2C/2D/6-1A/6-1B |  |
| 0 | 0 |
| 1 | -1 |
| 2 | -2 |
| 3 | 2 |

------------------------------------------------------- Text Ends ------------------------------------------------------------ |

CR-wise, two alternatives are proposed in [1] to correct this issue:

* Alt-1: Prepare a “Category D CR” for Rel-13 and the corresponding mirror CRs for the subsequent releases.
* Alt-2: Prepare a single “Category D CR” for Rel-17 along with the following note: “The clarification in this CR also applies to previous releases”.

To simplify the correction, a DRAFT CR has been prepared in [2] as per Alt-2.

Moreover, the “Consequences if not approved” state that: “There will be a misalignment between the title and the contents Table 10.1.2.1-1, and it will be unclear/confusing whether the mapping applies or not to DCI Formats 6-1A/6-1B”.

# 3 Companies views on: Missing DCI formats when mapping ACK/NACK resource offset field

The Moderator kindly requests companies to provide their views on the issue about “Missing DCI formats when mapping ACK/NACK resource offset field”.

**Question 1: Are you ok with the proposed correction on adding the missing DCI Formats into the contents of Table 10.1.2.1-1?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Yes/No** | **Comments** |
| **Lenovo** | **Yes** |  |
| **ZTE, Sanechips** | **Yes** |  |
| **Qualcomm** |  | **We don’t think it’s essential, but if the majority want to correct it we are fine.** |
| **Nokia, NSB** | **Yes** |  |

**Question 2: If yes to Question 1, which of the alternatives below do you prefer towards amending this issue?**

* **Alt-1: Prepare a “Category D CR” for Rel-13 and the corresponding mirror CRs for the subsequent releases.**
* **Alt-2: Prepare a single “Category D CR” for Rel-17 along with the following note: “The clarification in this CR also applies to previous releases”.**

|  |  |  |
| --- | --- | --- |
| **Company** | **Alt-1/Alt-2** | **Comments** |
| **Lenovo** | **Alt-2** |  |
| **ZTE, Sanechips** | **Alt-2** | **There is no issues for the UE implementation. It is kind of editorial correction, clarification in Rle-17 and adding the note could be enough.** |
| **Qualcomm** | **None** | **We cannot have a Cat-D CR for a frozen release, it should be a cat F. Rel-17 is enough (with Rel-13 WI + TEI17)** |
| **Nokia, NSB** | **Alt-2**  | **Subject to Qualcomm’s comment.** |

# References

1. [R1-2207574](https://www.3gpp.org/ftp/TSG_RAN/WG1_RL1/TSGR1_110/Docs/R1-2207574.zip), “Missing DCI formats when mapping ACKNACK resource offset field,” Ericsson, RAN1 #110, Toulouse, France, August 22nd – 26th, 2022.
2. [R1-2207575](https://www.3gpp.org/ftp/TSG_RAN/WG1_RL1/TSGR1_110/Docs/R1-2207575.zip), “DRAFT CR Missing DCI formats when mapping ACKNACK resource offset field,” Ericsson, RAN1 #110, Toulouse, France, August 22nd – 26th, 2022.