**3GPP TSG-RAN WG2 Meeting #109bis-e R2-200xxxx**

**E-meeting, April 20 – April 30, 2020**

**Agenda item:**6.0.3 (TEI16)

**Source:** LG Electronics Inc., MediaTek

**Title:** Report of [AT109bis-e][060][NR16] MAC eLCID and RACH stopping

**Document for:** Discussion and Decision

# 1. Introduction

This document is to report the result of the following email discussion in RAN2#109bis-e Meeting.

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| * [AT109bis-e][060][NR16] MAC eLCID and RACH stopping (LG, Mediatek)   Scope: treat [R2-2003024](file:///C:\Users\mtk04448\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\docs\R2-2003024.zip) and [R2-2002931](file:///C:\Users\mtk04448\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\docs\R2-2002931.zip)  Wanted outcome: if agreement can be reached, one or two in-principle-agreed CRs.  Deadline: April 29 0700 UTC |

# 2. Discussions

## 2.1 eLCID

In R2-2003024, it is proposed that the LCID values indicated by one-byte eLCID field is only used to identify MAC CE, rather than used to identity the logical channel of a MAC SDU (for SRB/DRB) or padding, with following observations and proposal.

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| **Observation 1: According to RAN2 agreement, Set1 LCID (LCID values below 64) should be used for more frequent and high priority MAC CE.**  **Observation 2: LCID values associated with logical channels of SRB/DRB should be put in Set1 LCID because they are frequently used to deliver MAC SDU.**  **Observation 3: Set2 LCID values is only used to identify MAC CE, rather than used to identify logical channel of SRB/DRB or padding.**  **Proposal 1: Set2 LCID (LCID values above 64 identified via one-byte eLCID field) is only used to identify MAC CE, rather than used to identity the logical channel of a MAC SDU or padding.** |

Companies are asked to provide their views whether it is ok to restrict the 1-byte eLCID field to MAC CE.

**Question 1. Do you agree to restrict the 1-byte eLCID field to MAC CE?**

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| **Company** | **Yes/No** | **Comment** |
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**Proposal 1: based on the outcome of the Question 1.**

If companies agree to restrict the 1-byte eLCID field to MAC CE, further discussion is needed whether to explicitly specify this restriction in the MAC specification.

**Question 2. If you agree to restrict the 1-byte eLCID field to MAC CE, do you agree to specify the restriction in the MAC specification?**

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| **Company** | **Yes/No** | **Comment** |
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**Proposal 2: based on the outcome of the Question 2.**

A text proposal is also provided in R2-2003024. If companies agree to specify the restriction in the MAC specification, it is further asked whether the text proposal provided in R2-2003024 is agreeable.

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| 6.2.1 MAC subheader for DL-SCH and UL-SCH The MAC subheader consists of the following fields:  - LCID: The Logical Channel ID field identifies the logical channel instance of the corresponding MAC SDU or the type of the corresponding MAC CE or padding as described in Tables 6.2.1-1 and 6.2.1-2 for the DL-SCH and UL-SCH respectively. There is one LCID field per MAC subheader. The LCID field size is 6 bits. If the LCID field is set to 34, one additional octet is present in the MAC subheader containing the eLCID field and follow the octet containing LCID field. If the LCID field is set to 33, two additional octets are present in the MAC subheader containing the eLCID field and these two additional octets follow the octet containing LCID field;  - eLCID: The extended Logical Channel ID field identifies the logical channel instance of the corresponding MAC SDU or the type of the corresponding MAC CE as described in tables 6.2.1-1a, 6.2.1-1b, 6.2.1-2a and 6.2.1-2b for the DL-SCH and UL-SCH respectively. The size of the eLCID field is either 8 bits or 16 bits. If the size of the eLCID field is 8 bits, it is only used to identify the type of the correpsonding MAC CE. |

**Question 3. If you agree to restrict the 1-byte eLCID field to MAC CE, and if you agree to specify the restriction in the MAC specification, do you agree to the text proposal provided above?**

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| **Company** | **Yes/No** | **Comment** |
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**Proposal 3: based on the outcome of the Question 3.**

## 2.2 RACH stopping

In R2-2002931, it is proposed to simplify the text about UE optional behavior on stopping ongoing RA procedure by specifying only the general principle, with following reasons.

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| The main point of this text is that the UE is allowed to stop the ongoing RA procedure if the ongoing RA procedure is no more needed. There may be various reasons that the ongoing RA procedure is no more needed, e.g. due to cancelling the SR that triggered the RA procedure, but specifying all the reasons is worthless. As long as this principle is kept, the UE implementation can this into consideration, and may stop the ongoing RA procedure if needed. Anyway, this is an optional UE behavior, and the implementation would not be impacted by specifying only the general principle. Moreover, if only general principle is specified, we don’t have to worry about future update even if a new SR trigger is introduced. |

Companies are asked to provide their views whether it is ok to simplify the text on stopping ongoing RA procedure by specifying only the general principle.

**Question 4. Do you agree to simplify the text on stopping ongoing RA procedure** **by specifying only the general principle?**

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| **Company** | **Yes/No** | **Comment** |
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**Proposal 4: based on the outcome of the Question 4.**

A text proposal is also provided in R2-2002931. If companies agree to simplify the text on stopping ongoing RA procedure by specifying only the general principle, it is further asked whether the text proposal provided in R2-2002931 is agreeable.

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| 5.4.4 Scheduling Request The MAC entity may stop, if any, ongoing Random Access procedure if the ongoing Random Access procedure is no more needed due to e.g. cancelling the pending SR that triggered the Random Access procedure. |

**Question 5. If you agree to simplify the text on stopping ongoing RA procedure** **by specifying only the general principle, do you agree to the text proposal provided above?**

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| **Company** | **Yes/No** | **Comment** |
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**Proposal 5: based on the outcome of the Question 5.**

# 3. Summary

To be filled later..