3GPP TSG-RAN WG2 Meeting #118 Electronic Draft - R2-2206362

Online, 09 – 20 May 2022

**Agenda item: 6.3.5**

**Source: Intel Corporation**

**Title: Report of [AT118-e][233][MUSIM] UE capability corrections for MUSIM (Intel)**

**Document for: Report**

# Introduction

This document is the report of the following offline discussion:

* [AT118-e][233][MUSIM] UE capability corrections for MUSIM (Intel)

Scope: Provide final input on the MUSIM capabilities for the UE capability mega-CR based on online decisions.

Intended outcome: Discussion report in [R2-2206362](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_118-e/Docs/R2-2206362.zip) and draft CRs (to be merged to the UE capability mega-CRs) in [R2-2206182](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_118-e/Docs/R2-2206182.zip) (38.306) and [R2-2206183](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_118-e/Docs/R2-2206183.zip) (38.331).

Deadline: Deadline 5

The consolidated draft CRs will be provided early next week based on initial feedback. To progress the initial draft CRs by Wed, I will set the deadline for comments as:

* **Comment deadline:** Tuesday W2, 2000 UTC (for collecting views)

# Contact points

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| --- | --- | --- |
| Company | Name | Email address |
| Nokia |  | amaanat.ali@nokia.com |
| MediaTek | Felix Tsai | chun-fan.tsai@mediatek.com |

# Discussion

## Capability for Support for Paging case in RAN paging

RAN2 made the following agreement:

* 1 Introduce a conditional mandatory UE capability without capability bit for support of Paging cause in RAN Paging.

The following text is proposed (based on the TP in [R2-2205547](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_118-e/Docs/R2-2205547.zip)) to capture this agreement in 38.306:.

**6 Conditionally mandatory features without UE radio access capability parameters**

| Features | Condition |
| --- | --- |
| Paging cause in RAN paging message (*fulIl-RNTI* based Paging) | It is mandatory for a UE to support Paging cause in RAN paging with RAN ID (*fullI-RNTI)* if UE supports Paging cause for NAS UE ID in Paging message at upper layers |

### Q1: Do companies agree with the above text to capture the agreement?

|  |  |  |
| --- | --- | --- |
| *Company* | *Yes/No* | *Comments. If “No”, please provide alternative suggestion* |
| Nokia | Yes | As also commented online we think this is useful to maintain traceability as the feature at NAS is definitely linked to the implementation at the UE for RRC\_INACTIVE handling which is originated by RAN paging. |
| MediaTek | Yes |  |
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## GAP preference capability also indicates support MUSIM gap configuration

[R2-2205756](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_118-e/Docs/R2-2205756.zip) [2] observed that a UE indicating a Gap preference UAI shall also support the related MUSIM gap configuration and provided the following TP.

**Proposal 1 Update musimGapPreference-r17 to account for the UE support of both MUSIM gap preference and MUSIM gap configuration.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***musimGapPreference-r17***  Indicates whether the UE supports providing MUSIM assistance information with MUSIM gap preference and related MUSIM gap configuration, as defined in TS 38.331 [9]. | UE | No | No | No |

### Q2: Do companies agree with the proposal and the proposed TP?

|  |  |  |  |
| --- | --- | --- | --- |
| *Company* | *Proposal*  *Yes/No* | *TP*  *Yes/No* | *Comments.*  *If “Yes” to proposal and “No” to proposed TP, please provide alternative suggestion* |
| Nokia | Yes | Yes | The clarification seems reasonable for us. |
| MediaTek | Yes | Yes |  |
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## Editorial update

[R2-2204616](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_118-e/Docs/R2-2204616.zip) made the following proposal and TP:

**Proposal 1: Align capability description in TS 38.306 for musimGapPreference-r17 on the same lines of musimLeaveConnected-r17 which also aligns well to TS 38.331.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***musimGapPreference-r17***  Indicates whether the UE supports providing MUSIM assistance information with indication of MUSIM gap (i.e. without leaving RRC\_CONNECTED) preference as defined in TS 38.331 [9]. | UE | No | No | No |

### Q4: Do companies agree with the proposed update?

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| --- | --- | --- |
| *Company* | *Yes/No* | *Comments.* |
| Nokia | Yes | This is rather editorial alignment to keep the consistency with TS 38.331. |
| MediaTek | No | We prefer to avoid the term “without leaving RRC\_CONNECTED” as proposed in R2-2204615. |
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## RRC Processing delay

[R2-2205756](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_118-e/Docs/R2-2205756.zip) [2] provided the following justification and proposal:

…since the UE can process an incoming RRC message during possibly configured gaps for MUSIM, or the network implementation can avoid sending RRC messages close to the gaps occurrences

**Proposal 2 No change of RRC processing delay requirements is needed for MUSIM UEs**

### Q3: Do companies agree with the proposal?

|  |  |  |
| --- | --- | --- |
| *Company* | *Yes/No* | *Comments.* |
| Nokia | Yes | Agree as we have discussed this several times earlier and have reiterated the same view. |
| MediaTek | See comment | In practical, UE may need more processing time in dual SIM case but we think no need to make this definition in SPEC (at leave in Rel-17). We suggest leave this part to NW/UE implementation. That is, No change on the SPEC and NO explicit agreement to say that that increasing of processing delay is needed or not. |
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# Conclusions and proposals

TBD

# References

[R2-2205547](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_118-e/Docs/R2-2205547.zip) Need for UE capability for Paging cause for RAN ID based paging Intel Corporation discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2205756](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_118-e/Docs/R2-2205756.zip) Remaining aspects on UE capabilities for Multi-USIM and other issues Ericsson discussion

[R2-2204616](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_118-e/Docs/R2-2204616.zip) Editorial corrections for UE capability Nokia, Nokia Shanghai Bell discussion Rel-17