3GPP TSG-RAN WG2 Meeting #115-e ***R2-210xxxx***

Electronic Meeting, August 16 – 27, 2021

**Agenda item:** 8.1.3.1

**Source:** Xiaomi Communications

**Title:** Report of [AT115-e][047][MBS] Service Continuity deliver mode 2

**Document for:**  Discussion

# 1. Introduction

This document summarizes the following email discussion:

* [AT115-e][047][MBS] Service Continuity deliver mode 2 (Xiaomi)

      Scope: Continue discussion on R2-2108799. Reach agreements as far as possible, can also define FFSes when helpful.

      Intended outcome: Agreements, report

      Deadline: Wednesday W2 (CB if needed)

Deadline: Tuesday 2021-08-24 2200 UTC

The RAN2 agreements made in Wednesday 2021-08-19 are quoted as follows:

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| **For IDLE / INACTIVE:**   * The UE is allowed to prioritize the MBS frequency of interest when the cell of the MBS frequency provides MBS SIB carrying the MCCH configuration, as LTE SC-PTM. * The UE is allowed to prioritize the MBS frequency of interest when the UE is only capable of receiving the MBS service by camping on the MBS frequency, as LTE SC-PTM. |

## 1.1 Contacts

Contact person for each participating company:

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| Company | Name | Email Address |
| Xiaomi | Yumin Wu | wuyumin@xiaomi.com |
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# 2. Discussion

## 2.1 Service continuity for delivery mode 2

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| **For IDLE/INACTIVE:**  **Proposal 3: The UE is allowed to set cell reselection candidate frequencies at which it cannot receive the MBS service to be of the lowest priority during the MBS session, as LTE SC-PTM.**  **Proposal 4: Send an LS to SA2 and SA4 to check whether the mapping between frequency and MBS service is provided in the upper layer signalling (e.g. USD), as LTE SC-PTM.**  **Proposal 5: The mapping between frequency and MBS service is provided in SIB, as LTE SC-PTM.**  **Proposal 6: The mapping between frequency and MBS service is allowed to be sent in cells not supporting MBS transmission, as LTE SC-PTM.**  **Proposal 7: The mapping between frequency and MBS service is provided in a new SIB different from the MBS SIB providing the MCCH configuration, as LTE SC-PTM.**  **Proposal 8: Send an LS to SA2, SA4 and RAN3 to check whether a group ID (e.g. SAI) of MBS services can be provided in SIB and USD, as LTE SC-PTM.**  **Proposal 9: The gNB indicate a list of neighbour cells where ongoing MBS service provided in the current cells are also provided, as LTE SC-PTM.**  **Proposal 13: The extra offset to cell (which provides the MBS service) for the cell ranking criterion is not supported in Rel-17.**  **For CONNECTED:**  **Proposal 10: The UE reports the following MBS interest information (as LTE SC-PTM):**   * **MBS frequency** * **priority between MBS bearer and unicast bearer** * **TMGI**   **Proposal 11: The MBS frequencies reported by the UE is sorted by decreasing order of interest, as LTE SC-PTM.**  **Proposal 12: Send an LS to SA3 to check whether the MBS interest information can be reported by the UE before security activation.**  **Proposal 14: Send an LS to RAN1 to check whether a UE is capble of receiving PTM simultaneously via multiple serving cells or via both serving cell and non-serving cell, within a band combination.**  **Proposal 15: FFS whether the frequencies in MII means that the UE shall be capable of simultaneously receiving MBS on the frequencies, as LTE SC-PTM. Wait for the feedbacks from RAN1 on the simultaneous MBS reception capability.**  **Proposal 16: FFS whether the frequencies in MII shall belong to the same band combination, as LTE SC-PTM. Wait for the feedbacks from RAN1 on the simultaneous MBS reception capability.** |

For Proposal 9, the guidance for the UE application layer is removed, as it does not touch any 3GPP specification. The FFS issues of Proposal 15 and Proposal 16 are added due to the discussion on the following questions:

* Question 12: When a list of frequencies are indicated in MII, should the UE be capable of simultaneously receiving MBS on the set of MBS frequencies of interest (regardless of whether a serving cell is configured on each of these frequencies or not), as LTE SC-PTM?
* Question 13: When a list of frequencies are indicated in MII, should the set of MBS frequencies of interest be part of a band combination of the UE, as LTE SC-PTM?

The above proposals are based on the majority views in R2-2108799 [1]. The number of majority companies are dominant, due to the eagerness of reusing the LTE SC-PTM baseline. Companies which object any of the above Proposals are encouraged to provide the detailed technical obstacles on why the LTE SC-PTM baseline cannot be reused. Wording improvement are welcome as always.

#### **Question: Which of the above Proposals from P3 to P16 are not acceptable to you?**

(The proposal number indicated in the “Answer” column will be considered as an objection to the Proposal. Companies only providing wording improvement are invited to provide the rewording in the “Comments” column without indicating the Proposal number in the “Answer” column, so as to avoid misunderstandings.)

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| **Company** | **Answer**  **(P3 – P16)** | **Comments** |
| Ericsson | P3, P5, P6, P7, P9, P13, P10, P11 | P3, P5, P6, P7, P9, P13:  We would prefer to resolve existence, availability, and function of USD, SAI, higher layer signalling etc. before deciding on a design which assumes availability of such. That is, we ask other groups for information before making decisions. The agreement in RAN2#113 states that we need to revisit this topic based on progress in other groups. Therefore it makes sense to send the LSs now and design later.   * Assume that some information for purpose of service continuity can be provided for NR MBS delivery mode 2. (FFS what - need to be revisited, e.g. based on progress in other groups, e.g. USD, SAI/TMGI etc)   P10, P11:  We think only TMGI is necessary. Other parameters can be FFS. |
| Qualcomm |  | In order to make progress in RAN2, these proposals can be agreed or use them as working assumptions. Based on LS reply received from other WGs, we can always revisit them if needed. |
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# 3. Summary

# 4. Reference

[1] [R2-2108799](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_115-e\Docs\R2-2108799.zip) Summary of [Post114-e][073][MBS] Service continuity for Delivery Mode 2 (Xiaomi) Xiaomi Communications discussion Rel-17 NR\_MBS-Core