3GPP TSG-RAN WG2 #112e R2-20xxxxx

Electronic meeting, November 2nd – 13th 2020

Agenda Item: 6.1.1

Source: Ericsson

Title: Summary of [AT112-e][039][NR16] SI acquisition

Document for: Discussion, Decision

# 1 Introduction

This document is to kick off the following email discussion:

* [AT112-e][039][NR16] SI acquisition (Ericsson)

Scope: Treat remaining aspects of papers under 6.1.1 “SI Acquisition”. Identify agreeable parts and agree them. For agreed parts, agree revised CRs.

Intended outcome: Report, agreed CRs.

Deadline: Agreements ready at EOM, Rapporteur may set intermediate deadlines

**Deadline Phase 1:** Collect companies’ views and formulate proposals, by Friday November 6th 12:00 UTC

**Deadline Phase 2:** Further review proposals and related CRs, by Thursday November 12nd 1100 UTC

# 2 Discussion

During the online session on Monday this topic was treated online and a preliminary agreement was made. Here you can find the summary of the discussion plus the agreement:

SI acquisition

[R2-2010272](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_112-e/Docs/R2-2010272.zip) Correction on acquisition of MIB and SIB1 Huawei, HiSilicon, Ericsson CR Rel-16 38.331 16.2.0 2198 - F NR\_pos-Core

[R2-2009101](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_112-e/Docs/R2-2009101.zip) Corrections to SI acquisition in RRC\_CONNECTED Samsung Electronics Co., Ltd CR Rel-16 38.331 16.2.0 2033 - F 5G\_V2X\_NRSL-Core, NR\_pos-Core

DISCUSSION on the two CRs above, Mon NOV 2.

- Ericsson believe that if the first doc is agreed then the second doc is not needed. MTK agrees but think the text need to be changed also in the second CR, remove the word “stored”. Intel agrees.

- LG think a UE monitors notifications, and think a UE will know when SIB1 is modified and there is no issue to resolve (SS CR)

- QC think it is strange to say from current modification period, but for pos modification period does not apply so UE may need to acquire outside Mod period, but for legacy no need.

- Nokia wonder why a UE would need to acquire SIB1 again and again

- Samsung think there is no intention to impact legacy, the affected text is only executed for the R16 Si acq in connected. QC think we should be careful, and think the CR indeed change legacy behaviour. Samsung think there is some confusion there is no side effect.

- CATT think the refe to modification period in SS CR is not correct, and think it is up to UE implement when to get SIB1.

- Samsung think that 10272 says that the UE then need to always acquire SIB1. Huawei think that the Bcast status may change during modification period, and think that SIB1 would be acquired based on need from upper layer. Ericsson agrees. Samsung think we should specify the condition for acquiring SIB1. Huawei think the SIB1 would just be additionally acquired when application SIB is required.

- Chair: There seems to be support for changes in 10272.

* When UE trigger SIB acquisition in Connected and SIB Bcast status is nonbroadcast, then the UE shall acquire SIB1 without paying respect to modification period (same as Idle mode R15 procedure).

[R2-2009945](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_112-e/Docs/R2-2009945.zip) Clarifications for the common search space on the active BWP Ericsson CR Rel-16 38.331 16.2.0 2146 - F NR\_newRAT-Core

Moved from 6.1.3

[R2-2009102](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_112-e/Docs/R2-2009102.zip) Corrections to SI acquisition in IDLE\_INACTIVE Samsung Electronics Co., Ltd CR Rel-16 38.331 16.2.0 2034 - F 5G\_V2X\_NRSL-Core, NR\_pos-Core

Here is the following, we would like to ask companies to provide additional comments on the four CRs so to provide a revision, if needed.

## 2.1 Correction on acquisition of MIB and SIB1

[R2-2010272](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_112-e/Docs/R2-2010272.zip) Correction on acquisition of MIB and SIB1 Huawei, HiSilicon, Ericsson CR Rel-16 38.331 16.2.0 2198 - F NR\_pos-Core

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| Company | Agree (Yes/No)? | Comments |
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## 2.2 Corrections to SI acquisition in RRC\_CONNECTED

[R2-2009101](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_112-e/Docs/R2-2009101.zip) Corrections to SI acquisition in RRC\_CONNECTED Samsung Electronics Co., Ltd CR Rel-16 38.331 16.2.0 2033 - F 5G\_V2X\_NRSL-Core, NR\_pos-Core

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| Company | Agree (Yes/No)? | Comments |
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## 2.3 Corrections to SI acquisition in IDLE\_INACTIVE

[R2-2009102](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_112-e/Docs/R2-2009102.zip) Corrections to SI acquisition in IDLE\_INACTIVE Samsung Electronics Co., Ltd CR Rel-16 38.331 16.2.0 2034 - F 5G\_V2X\_NRSL-Core, NR\_pos-Core

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| Company | Agree (Yes/No)? | Comments |
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## 2.4 Clarifications for the common search space on the active BWP

[R2-2009945](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_112-e/Docs/R2-2009945.zip) Clarifications for the common search space on the active BWP Ericsson CR Rel-16 38.331 16.2.0 2146 - F NR\_newRAT-Core

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| Company | Agree (Yes/No)? | Comments |
| Ericsson (Martin) | Partially | After further review, we propose the following change to the *proposed corrections in section* 5.2.2.2.:  UEs in RRC\_IDLE or in RRC\_INACTIVE shall monitor for SI change indication in its own paging occasion every DRX cycle. UEs in RRC\_CONNECTED shall monitor for SI change indication in any paging occasion at least once per modification period if the UE is provided with common search space, including *pagingSearchSpace*, *searchSpaceSIB1* and *searchSpaceOtherSystemInformation*, on the active BWP to monitor paging, as specified in TS 38.213 [13], clause 13.  ETWS or CMAS capable UEs in RRC\_IDLE or in RRC\_INACTIVE shall monitor for indications about PWS notification in its own paging occasion every DRX cycle. ETWS or CMAS capable UEs in RRC\_CONNECTED shall monitor for indication about PWS notification in any paging occasion at least once every *defaultPagingCycle* if the UE is provided with common search space, including *pagingSearchSpace*, *searchSpaceSIB1* and *searchSpaceOtherSystemInformation,* on the active BWP to monitor paging.  For Short Message reception in a paging occasion, the UE monitors the PDCCH monitoring occasion(s) for paging as specified in TS 38.304 [20] and TS 38.213 [13].  If the UE receives a Short Message, the UE shall:  1> if the UE is ETWS capable or CMAS capable, the *etwsAndCmasIndication* bit of Short Message is set, and the UE is provided with *~~pagingSearchSpace~~*, *searchSpaceSIB1* and *searchSpaceOtherSystemInformation* on the active BWP or the initial BWP:  2> immediately re-acquire the *SIB1*;  When the UE receives a Short Message, then apparently the UE was configured with a paging search space on the active BWP.  We also think that the proposed changes in section 5.2.2.3.5 are not needed, because the UE does not need a paging search space nor SIB1 search space on the active BWP to receive SI on-demand in connected mode. |
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# 3 Conclusion

According to the previous sections the following proposals are made:

# 4 Contact Information

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| Ericsson (Martin) | martin.van.der.zee@ericsson.com |
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