**3GPP TSG RAN WG1 #102-e R1-200xxxx**

**E-Meeting, 17th** **August – 28th August, 2020**

Agenda: 5

Source: Moderator (ZTE)

Title: Summary of [102-e-LS-AI5-05] discussions for a reply LS on exchange of information related to SRS-RSRP measurement resource configuration for UE-CLI

**Document for:** **Discussion and Decision**

# **Introduction**

RAN1 received an LS [1] from RAN3 on exchange of information related to SRS-RSRP measurement resource configuration for UE-CLI. In the LS, RAN3 asked the following question and would like to receive RAN1 feedback.

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| --- |
| **Question to RAN1:**   * What is the maximum frequency of inter-gNB exchange of SRS configuration required to enable configuration of SRS-RSRP measurements of potential CLI aggressor cells in served UEs? |

As guided by the Chairman, this summary is to collect companies’ views on the questions in the LS and draft the reply based on the collected input.

[102-e-LS-AI5-05] Email discussion/approval of reply LS for R1-2005218 by 08/20 (TBD, ZTE)

# **Summary of views on reply LS**

Six contributions providing the views and draft response to the RAN3 LS were submitted to RAN1#102-e meeting. The views are summarized in the following table.

Table 1 Summary of the views from the submitted contributions

|  |  |
| --- | --- |
| company | view |
| ZTE[2] | The maximum exchange frequency of SRS configuration is hundreds of milliseconds or seconds depending on the scenarios in which CLI feature is applied |
| CATT[3] | The inter-gNB exchange of SRS configuration per several hundred milliseconds is sufficient considering only periodic SRS can be used for the L3 CLI measurement. |
| Samsung[4] | The maximum frequency of inter-gNB exchange of the SRS configuration can vary and depends on gNB implementation, as SRS configuration of the aggressor UE can be dynamically changed or can be changed for longer time or can be changed semi-statically for very long time |
| NOKIA[5,6] | The maximum exchange frequency of SRS configuration per UE is at least tens of seconds, or even longer, given the steps of implementing the SRS-RSRP measurement, the RRC signalling is relative slow and the victim UEs perform Layer-3 filtering of the CLI measurements. The overhead from such XnAP signalling of SRS configurations of victim UEs is therefore considered to be marginal, and desirable to have standardized. |
| Huawei, HiSilicon [7] | The maximum frequency of inter-gNB exchange of SRS configuration can be per millisecond per UE considering the aggressor UEs in the neighbouring cell are moving around and the dynamic TDD UL/DL configuration of potential aggressor UEs by dynamic SFI in the neighbouring aggressor cell |

According to the above table, companies’ views of the maximum frequency of inter-gNB exchange of SRS configuration seem diverse. More discussions are needed to draft the response.

# **Discussion**

The above proposals can be categorized to two levels of maximum frequency.

Semi-static or static (e.g. in the level of hundreds of milliseconds or more): ZTE/Sanechips, CATT, Nokia, Samsung

Dynamic (e.g. in the level of millisecond): Huawei/HiSi, Samsung

Since different companies have different views based on different understanding on the CLI feature, more input from companies are desirable. To help on drafting the LS response, companies are encouraged to provide any additional views of the maximum frequency of inter-gNB exchange of SRS configuration

**Table 2 Additional views of the maximum frequency of inter-gNB exchange of SRS configuration**

|  |  |
| --- | --- |
| company | Comments |
|  |  |
|  |  |

# **Draft reply LS**

Based on the majority view we got so far, the reply LS is drafted as follows.

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| --- |
| RAN1 would like to thank RAN3 for the LS. RAN1 discussed the question in the LS and reached the following agreement.  **Question to RAN1:**   * What is the maximum frequency of inter-gNB exchange of SRS configuration required to enable configuration of SRS-RSRP measurements of potential CLI aggressor cells in served UEs?   **Answer:** Since the CLI SRS-RSRP measurement is L3-measurement, the configuration of SRS resource would be static or semi-static. Once it is configured, the measurement can be done periodically. As a result, it does not usually require very frequent configuration. Therefore, to enable the CLI SRS-RSRP measurements, the maximum frequency of inter-gNB exchange of SRS configuration usually ranges from hundreds of milliseconds to tens of seconds. |

**Any comment?**

|  |  |
| --- | --- |
| Company | Comments |
|  |  |
|  |  |

# **Conclusion**

[TBD]

# **References**

1. R1-2005218. Response LS on Exchange of information related to SRS-RSRP measurement resource configuration for UE-CLI, RAN3, ZTE
2. [R1-2005518](file:///C:\Users\wanshic\OneDrive%20-%20Qualcomm\Documents\Standards\3GPP%20Standards\Meeting%20Documents\TSGR1_102\Docs\R1-2005518.zip). Draft reply LS on exchange of information related to SRS-RSRP measurement resource configuration for UE-CLI, ZTE
3. [R1-2005653](file:///C:\Users\wanshic\OneDrive%20-%20Qualcomm\Documents\Standards\3GPP%20Standards\Meeting%20Documents\TSGR1_102\Docs\R1-2005653.zip). Draft reply LS to RAN3 on inter-gNB exchange of SRS configuration, CATT
4. [R1-2006083](file:///C:\Users\wanshic\OneDrive%20-%20Qualcomm\Documents\Standards\3GPP%20Standards\Meeting%20Documents\TSGR1_102\Docs\R1-2006083.zip). [Draft] Reply LS on Exchange of information related to SRS-RSRP measurement resource configuration for UE-CLI, Samsung
5. [R1-2006450](file:///C:\Users\wanshic\OneDrive%20-%20Qualcomm\Documents\Standards\3GPP%20Standards\Meeting%20Documents\TSGR1_102\Docs\R1-2006450.zip). Draft reply to the LS on Exchange of information related to SRS-RSRP measurement resource configuration for UE-CLI, Nokia, Nokia Shanghai-Bell
6. [R1-2006451](file:///C:\Users\wanshic\OneDrive%20-%20Qualcomm\Documents\Standards\3GPP%20Standards\Meeting%20Documents\TSGR1_102\Docs\R1-2006451.zip). On inter-gNB exchange of SRS configuration for CLI measurement, Nokia, Nokia Shanghai-Bell
7. [R1-2006944](file:///C:\Users\wanshic\OneDrive%20-%20Qualcomm\Documents\Standards\3GPP%20Standards\Meeting%20Documents\TSGR1_102\Docs\R1-2006944.zip). Discussion on Exchange of information related to SRS-RSRP measurement resource configuration for UE-CLI, Huawei, HiSilicon