**3GPP TSG-RAN WG2 Meeting #126 R2-240xxx**

**Fukuoka, Japan, May 20th – 26th, 2024**

**Agenda item: 7.2.5**

**Source: Huawei, HiSilicon**

**Title: Summary for [AT126][407][POS] Rel-18 SRSp enhancement fields in INMs (Huawei)**

**Document for: Discussion and Decision**

# Introduction

During RAN2#126, the following proposals from the tdoc have been discussed on whether internode message needs to include the fields related to SRS enhancements in Release 18

[R2-2404764](file:///C%3A%5CUsers%5Cmtk16923%5CDocuments%5C3GPP%20Meetings%5C202405%20-%20RAN2_126%2C%20Fukuoka%5CExtracts%5CR2-2404764%20Discussion%20on%20the%20remaining%20issues%20for%20R18%20RRC%20%5BH905%5D%5BH920-921%5D.docx) Discussion on the remaining issues for R18 RRC [H905][H920-921] Huawei, HiSilicon discussion Rel-18 NR\_pos\_enh2

Proposal5: Add the RRC fields for R18 enhancements for positioning SRS transmission in RRC\_INACITVE in R18 in the internode message HandoverPreparationInformation

In this email discussion, we discuss on the issues have been presented

# Discussion

## RAN2/3 to discuss the issue?

During the discussion in RAN2#126, the issue in the above section has been discussed in RAN2 and companies think there is a parallel discussion in RAN3 and parallel discussion should be avoided, and we should wait for RAN3 conclusions.

However, during offline discussion in RAN3 [CB # 13\_Positioning], the following agreement has been reached regarding which group to discuss:



Based on the above progress, it seems that RAN3’s understanding is that RAN2 should discuss on this issue first. Hence, we would like to ask the following question:

***Question1: Do companies agree that RAN2 should discuss the issue of whether to include R18 SRS enhancements for RRC\_INACTIVE in RAN2?***

|  |  |  |
| --- | --- | --- |
| Companies | Yes/No | Comments |
| Samsung | Yes | Now it seems like that RAN2 and RAN3 ping pong this issue. In our view, RAN2 should discuss it and make a decision to support the pre-configuration feature correctly before ASN.1 freeze.  |
| ZTE | No | It is a totally RAN3 functionality issue, not RAN2.This is all about **how neighbor gNB knows the UE’s pre-configured SRS configuration from the last serving gNB.** It is the interaction between neighboring gNB and last serving gNB (e.g., relocation/non-relocation way).  |

## Discussions on the INM

The background of the field in the legacy releases are as follows. In the legacy CG-SDT, the following has been captured in the current RRC spec in the internode message.



With the same reason as CG-SDT, we think the SRS configurations should also be included in the internode message to support the case when the UE sends RRC resume request in a cell different from the last serving gNB. This is already clear in the following procedure agreed in RAN3 for 38.305



Within the XN-AP message RETRIEVE UE CONTEXT RESPONSE, the internode message *HandoverPreparationInformation* is used



Hence, we ask the following question:

***Question2: Do companies agree that SRS configurations for LPHAP introduced in RRCRelease message in R18 should be added to the internode message HandoverPreparationInformation?***

|  |  |  |
| --- | --- | --- |
| Companies | Yes/No | Comments |
| Samsung | Yes | The positioning SRS pre-configuration forwarding from last serving gNB to new serving gNB is essential to support the R18 pre-configuration feature. The only issue is now whether it is done by either RRC container-based solution or Xn-based solution. In our view, we can simply go with the RRC container-based solution as in the case of R17 SDT since both solution can work and there is no reason to have different solution for R18 SRS. |
| ZTE | No | Since it is totally RAN3 issue, XnAP is more suitable to be specified. we prefer to specify the interaction/signaling directly in XnAP message.RAN3 should be responsible of making the spec change. |

# Conclusion

TBD