3GPP TSG-RAN WG2 #117-e Tdoc R2-21xxxxx

Electronic meeting, 2022-02-21 - 2022-03-03

Agenda Item: 8.11.1

Source: Ericsson

Title: [Pre117-e][613][POS] RAN1 parameter list impact to RRC

Document for: Discussion, Decision

# 1 Introduction

# 1 Introduction

This document is to collect comments for the CR:

* [Pre117-e][613][POS] RAN1 parameter list impact to RRC running CR (Ericsson)

Please provide your comments related to the CR

# 2 Contact Information

|  |  |
| --- | --- |
| Company | Contact: Name (E-mail) |
| Intel | Yi Guo (yi.guo@intel.com) |
| Huawei, HiSilicon | Yinghao Guo (yinghaoguo@huawei.com) |
| vivo | Xiang Pan (panxiang@vivo.com) |
| Nokia | Mani Thyagarajan (mani.thyagarajan@nokia.com) |
| CATT | Jianxiang Li (lijianxiang@catt.cn) |
| Xiaomi | Xiaolong Li (lixiaolong1@xiaomi.com) |
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# 3 Comments

**Please provide the comments on the CR here:**

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| Company | Comments |
| Intel | 1 Following RAN1 parameter is missing, should be added in reconfiguration message?UETxTEG\_Request\_UL-TDOA, The parameter is used for the serving gNB to request a UE to provide UE Tx TEG association for UL-TDOA .Rapp: This should basically be same as ***txTEG-PeriodicalReporting; this parameter is used by*** for the serving gNB to request a UE to provide UE Tx TEG association for UL-TDOA .**The UETXTEG is applicable only when SRS transmission has been configured. And RAN1 agreement says:** *Based on a configured periodicity, a UE may report the UE Tx TEG association for the SRS resources for positioning that have already been transmitted during the configured period*Currently, the ***txTEG-PeriodicalReporting; is part of SRS-Config but yes it can be configured in RRCReconfiguration and name of txTEG-PeriodicalReporting can be*** UETxTEG\_Request\_UL-TDOA2 comma is missing for uePositioningAssistanceInfo-r17 UEPositioningAssistanceInfo-IES-r17Rapp: Thanks corrected3 For new message, why SRB3 is needed? We should not consider SCG case;Rapp: Ok removed. |
| Huawei, HiSilicon | 1/ On the field description for resourceType, we think it can be captured as “when SRS config is included in RRCRelease with suspendConfig, the resourceType should not be set as “aperiodic””2/ We think it is better not to use the IE BWP to configure offsetToPointA, SCS and CP type. In the IE BWP, there is locationAndBandwidth, but the Bandwidth here is not needed. Bandwidht is configured under the SRS configuration. We prefer to configure offsetToPointA, SCS and CP type in separate fields. 3/ TA validation is captured in the MAC spec for SDT. We think this should be the same for INACTIVE SRS, same view as Intel above. 4/ Same view as Intel on msg3. It should also be noted that discussion is still ongoing in another emailRapp: The above comments are applicable to RRC Inactive CR whereas now we discuss the high accuracy, low latency (RAN1 parameter list) |
| vivo | 1. In the cover sheet, the following editorial change:

High accuracy and low latency features may not be supportedRapp: Thanks done1. In section 5.7.XX.1, the RRCReconfiguration procedure can be added in Figure 5.7.XX.1-1 to illustrate when will the UE send the UE Positioning Assistance Information.

Rapp: OK1. In section 5.7.XX.2, the following editorial change:

A UE capable of providing the association between UL SRS Resource for positioning and UE Tx TEG ID in RRC\_CONNECTED may initiate the procedure upon being configured to provide this ~~indication~~ association.if *txTEG-PeriodicalReporting* in *SRS-Config IE* is configured to provide the association between UL SRS Resource for positioning ~~with~~ and Tx TEG:Rapp: Thanks done1. In section 5.7.XX.3, the following editorial change:

The UE shall set the contents of the *~~UEAssistanceInformation~~* *UEPositioningAssistanceInfo* message as follows:1> if transmission of the *UEPositioningAssistanceInfo* message is initiated to provide the association between UL SRS Resource for positioning ~~with~~ and Tx TEG according to 5.7.XX.2 ;2> include *ue-TxTEG-AssociationList* in the *UEPositioningAssistanceInfo* message;Rapp: Thanks done1. The “DL-PRS-PROCESSINGWINDOW” should be “DL-PRS-ProcessingWIndow”. (Note the case of letters).

Rapp: Thanks done1. Agree with Intel and Huawei, the “SRB3” should be removed.

Rapp: Yes1. The format of SRS in UEPositioningAssistanceInfo shall align with the conclusion in [611], which could be a bitmap.

Rapp: Yes1. “gapConfigList-r17” and “DL-PRS-ProcessingWindowConfig” should be explicitly reflected as pre-configured. So we suggest changing to “preGapConfigList-R17” and “DL- PRS-ProcessingWindowPreConfig”.
2. We wonder whether the pre-configured gap should support per-UE/per-FR1/per-FR2 similar to the legacy gap.

Rapp: This can be part of capability discussion |
| Nokia | 1. The UE positioning assistance information procedure and message is generic now but should this be specific to TEG association reporting in terms of procedure and message name?Rapp: It should be possible to extend in future for other purpose too; i.e it does not need to be limited to TEG association. The generic IE allows extension to add similar to current TEG association reporting 2. Why do we need signaling over SRB3 for UEPositioningAssistanceInfo message?Rapp: This can be removed3. Why is a *nr-TimeStamp-r17* needed in *UE-TxTEG-Association-r17*?Since the reporting is at certain interval; at what time the UE recorded the precise change Rapp: association is good to have.4. Some typos in the CR e.g. UETxTEG-Assoiciation, AssocaitedSRS -PosResourceIdThanks fixed5. Fix the font case in DL-PRS-PROCESSINGWINDOWRapp: Thanks6. in the description for DL-PRS-ProcessingWindow, we don’t have to say “where subject to UE capability”Rapp: Thanks removed7. Good to have a field description for cellID-r17 in DL-PRS-ProcessingWindow field descriptionsRapp: OK8. Instead of adding gapConfigID-r17 to MeasGapConfig IE, can we not define a new IE MeasGapPreConfig which includes MeasGapConfig and gapConfigID-r17?Rapp: Yes that should also be possible.9. Having oneShot in txTEG-PeriodicalReporting-r17 looks unusual. Can we not define a txTEG-Reporting-r17 IE with CHOICE oneshot and periodical and then for periodical choice we define txTEG-PeriodicalReporting with ENUMERATED {ms120, ms240, ms480, ms640, ms1024, ms2048, ms5120, ms10240, ms2048, ms5120, ms10240, ms20480, spare4, spare3, spare2, spare1}?Rapp: Thanks  |
| CATT | 1. The UE TxTEG report config is an event trigger config.

Discussion on configuration in SRS-Config and report in detail is on going in [Pre117-e][611][POS] Open issues on positioning accuracy enhancements (CATT). The details of RRC impact will be updated accordingly. No more comments are list here.1. Comments on 5.7.XX

The UE Positioning Assistance Information procedure is used by UE to report the UE Positioning Assistance Information. The UE reports the association between UL-SRS resources for positioning and the UE Tx TEG ID and the changes of the association. 5.7.XX.2 InitiationA UE capable of providing association between UL SRS Resource for positioning and UE Tx TEG ID in RRC\_CONNECTED may initiate the procedure upon being configured to provide this indication.Upon initiation of the procedure, the UE shall:1> if *txTEG-PeriodicalReporting* in *SRS-Config IE* is configured to provide association between UL SRS Resource for positioning with Tx TEG:2> initiate transmission of the *UEPositioningAssistanceInfo* message in accordance with 5.7.XX.3 to provide the association and the changes of the association.Rapp: If I understand the change of association is still being discussed.5.7.XX.3 Actions related to transmission of *UEPositioningAssistanceInfo* messageThe UE shall set the contents of the *UEPositioningAssistanceInfo* message as follows:1> if transmission of the *UEPositioningAssistanceInfo* message is initiated to provide association between UL SRS Resource for positioning with Tx TEG according to 5.7.XX.2 ;2> include *ueTxTEG-AssociationList* in the *UEPositioningAssistanceInfo* message;Rapp: corrected1. Comments on *UEPositioningAssistanceInfo*

SRB3 can be deleted for *UEPositioningAssistanceInfo* since there isno such message on SRB3 when UE is in (NG)EN-DC or NR-DC.Rapp: Agree1. Recommend maxNrOfTEG-ID-r17 as 8, considering:
2. the encoded RRC message should not be larger than the maximum supported size of a PDCP SDU specified in TS 38.323, otherwise segmentation is required.
3. The maximum supported size of a PDCP SDU is 9000 bytes.
4. The maximum size of UE-TxTEG-AssoiciationList-r17 is about 780bytes.

Rapp: Sounds reasonable |
| Xiaomi | 1. For UE reporting the association between UL-SRS resources for positioning and the UE Tx TEG ID, the request from gNB should be added in RRC reconfiguration message.

Rapp: Agree thanks1. For the filed description on ***nr-TimeSTamp,*** this field specifies the time instance at which the measurement is performed, we don’t think the time is for measurment performed and it indicates the time on the assositation between UL SRS Resource for positioning and UE Tx TEG ID.

Rapp: Thanks corrected1. For the GapConfigList, may be better to add filed description.

Rapp: Ok thanks |
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# Conclusion

In the previous sections we made the following observations: