Companies are to share their inputs on the excel spreadsheet in /tsg\_ran/WG1\_RL1/TSGR1\_106b-e/Inbox/drafts/8.1.3/RRC parameters/ herein.

## Inputs on version 00

Please share your inputs, if any, in the following table

Table 1 Inputs: Initial version

|  |  |
| --- | --- |
| **Company** | **Input** |
| QC | * **For the value range, suggest updating the deiscrtipon by adding a sentence that candidate values include 0. This is based on RAN1 agreement below.**

**Agreement**A given aperiodic SRS resource set is transmitted in the (t+1)-th available slot counting from a reference slot, where t is indicated from DCI, or RRC (if only one value of t is configured in RRC), and the candidate values of t at least include 0.* **We need to discuss the granularity of RRC parameter ‘TriggerSRSOnly’. There is no RAN1 agreement that indicate per-UE configuration. Our preference is per-CC. So, suggest adding FFS on the gruanlirty.**
* **For “EnableStartRBHopping”, suggest clarifying the description field and use similar language based on the RAN1 agreement. Also, suggest enabling this feature when this RRC parameter is configured.**

“When this RRC parameter is configured, ~~Enable or disable~~ start RB location hopping is enabled for partial frequency sounding in different SRS frequency hopping periods for periodic/semi-persistent SRS based on the hopping pattern $k\_{hopping} $as described in Clause X.Y in TS38.211”

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Parameter name in the spec** | **New or existing?** | **Parameter name in the text** | **Description** | **Value range** | **Default value aspect** | **Per (UE, cell, TRP, …)** |
| AvailableSlotOffset | New |   | The t value, which indicates the number of available slots from slot n+k to the slot where the aperiodic SRS resource set is transmitted, where slot n is the slot with the triggering DCI, and k is the legacy triggering offset (slotOffset).  | A list with up to 4 values per SRS resource set.(t0, t1, t2, t3), where each entry takes value from {0, 1, 2, …, 7}.At least one candidate values include 0. |  | Per SRS resource set |
| TriggerSRSOnly | New |   | When this parameter is configured, UE can be indicated with DCI 0\_1 and 0\_2 to trigger aperiodic SRS without data and without CSI as described in clause 7.3.1.1 of TS38.212. Otherwise, except for DCI format 0\_1/0\_2 with CRC scrambled by SP-CSI-RNTI, a UE is not expected to receive a DCI format 0\_1/0\_2 with UL-SCH indicator of "0" and CSI request of all zero(s) as described in clause 7.3.1.1 of TS38.212. |  |  | FFS: per-UE, per-cell, ... |
| EnableStartRBHopping | New |   | When this RRC parameter is configured, ~~Enable or disable~~ start RB location hopping is enabled for partial frequency sounding in different SRS frequency hopping periods for periodic/semi-persistent SRS based on the hopping pattern k\_hopping as described in Clause X.Y in TS38.211 | ~~{'Enable', 'Disable'}~~ |  | Per SRS resource |

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| Huawei，HiSilicon | **The RRC parameter *TriggerSRSOnly* is not necessary, which should be removed.** With UE capability reporting, UE tell gNB the restriction on SRS transmission with CSI and data is released, then gNB can schedule SRS transmission without CSI and data. No any RRC signaling is needed. **Then, for QC’s comment on adding “At least one candidate values include 0”, we do NOT think the restriction should be be added.** In the agreement, the sentence is to say the value 0 is included in the range of ‘t’ values, which have been reflected in the original description. It does not mean one of {t0, t1, t2, t3} is always 0, which actually too restriction on the t values configuration. Please note that if following the understanding from QC’ revision, then if one value of ‘t’ configured, it is always 0.  |
|  Intel | Regarding the new parameter for increased repetition, we think the existing parameter should be used.In the current spec, the repetition pattern is defined by parameter *nrofSymbols*, and *repetitionFactor*. The value range of these two existing parameters could be extended to cover the new pattern introduced in Rel-17. |
| CATT | * On *availableSlotOffset*: We have similar interpretation as Huawei that “**At least one candidate values include 0**” in the agreement means the candidate values for t should include 0, not each SRS resource set has to be configured with t value euqals to 0. Therefore “each entry takes value from {0, 1, 2, …, 7}” has captured the agreement.
* On *TriggerSRSOnly*: This parameter is not needed since gNB can schedule SRS transmission without CSI and data for the UEs support this feature directly.
* On *IncreaseRepetitionPattern:* We have similar view with Intel. Two fields, such as *nrofSymbols* and *repetitionFactor* should be provided to configure the number of SRS symobls and repetition factor for the enhanced SRS feature in Rel-17. In addition, the starting position of $N\_{symb}^{SRS}$SRS symbols should also be provided to ensure the location of SRS transmission. Hence, an another field, e.g., *startPosition-r17* in the higher layer parameter for Rel-17 SRS enhancement should be introduced.
* On *transmissionComb*: This parameter should be a new parameter. Comb-8 is supported to enhance SRS in Rel-17. The exiting parameter transmissionComb-r16 is used for SRS positioning, which cannot be used to configure for MIMO SRS.
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| OPPO | * “**At least one candidate values include 0**”, we share the same view as Huawei and CATT. The added part from QC is not needed
* *transmissionComb*: The existing one is only for SRS for positioning. Thus, we agree with CATT that it should be a new parameter
* *TriggerSRSOnly*: We support to keep this parameter. If there is no RRC configuration, when the UE received a such kind of SRS triggering, UE doesn’t know whether it is an erro case from legay gNB or is an valid DCI from new gNB with the intention.
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| *FL* | An updated list has been uploaded to V02. **It seems one contentious point is whether “TriggerSRSOnly” should be kept. FL encourages more companies to share your view on this.**@Qualcomm, The text is updated based on your last two bullets. For your first bullet, I tend to agree with Huawei, OPPO and CATT that the previous agreement talks about candidate values not configured values.@Huawei,For TriggerSRSOnly, my understanding is similar as OPPO’s. It is needed to have this RRC parameter as two different bahaviors are defined for receiving a DCI Rel-15 and Rel-17. Otherwise there would be some issue for a Rel-15 gNB to serve a Rel-17 UE. Let’s keep it here for now. Let’s see how other companies think in the second round.@Intel,This parameter is updated based on your preference, but these two should be new parameters. We shouldn’t change Rel-15 ASN.1, otherwise there would be NBC issue for Rel-15 UEs to receive RRC message.@CATT,AvalaibleSlotOffset: see my reply to QC.TriggerSRSOnly: see my reply to Huawei.IncreaseRepetitionPattern: see my reply to Intel. For the start position, at least it should be fine to reuse the Rel-16 start position from RAN1 perspective. If RAN2 finds an issue and wants to define a totally new resourceMapping IE, they can do this by themselves. It should be up to RAN2’s discussion and decision. Let’s do not debate too much on the detailed signaling design.transmissionComb: Agree. Have changed it to “New”.@OPPO,Please see the update on transmissionComb. Let’s see how other companies think on “TriggerSRSOnly”. |
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## Inputs on version 01

Please share your inputs, if any, in the following table

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| --- | --- |
| **Company** | **Input** |
| QC | We think that the **TriggerSRSOnly** RRC parameter should be kept. Every UE feature should be accompanied by RRC parameter to indicate to the UE the configuration of that feature by that gNB. *We would like to ask the group on the common understanding when only one t-value is configured, what should be this value?* Based on my reading to the agreement and prior discussion in earlier GTW sessions, this single t-value should be ‘0’. |
| Intel | Regarding TriggerSRSOnly, we are fine to remove it.Regarding the candidate values of ‘t’, we think QC’s interpretation is more aligned with the agreement. But we are also fine to further clarify on this. Single t value means 0 is too restrictive. |
| LGE | * Fine with updated *repetitionFactor* and *nrofSymbols*.
* For *TriggerSRSOnly*, we can live with it.
* Regarding “At least one candidate values include 0”, we share the similar view with HW, CATT, and OPPO. For QC’s question, we think there is no restriction for t-value when only one t-value is configured.
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