**[102-e-NR-5G\_V2X\_NRSL-SYNC-01]**

**Email discussion/approval with respect to the following aspects (see also the summary):**

* **1-1: Confirm the working assumption on SL SCS ref and granularity.**
* **1-2: Specify the Rx side formula to avoid mis-alignment interpretation on UL slots between Tx UE and Rx UE.**
* **1-3: Absence of TDD indications in SIB1**
* **1-5: UL slots location indication**

**By 8/21, with potential TPs by 8/26 – Teng (CATT)**

For the discussion on SL SYNC in this meeting, companies are encouraged to follow the steps:

* 8/17-8/18: 1st stage to determine about the necessity of the issues.
* 8/18-8-20: Proposals will be provided based on the discussion and contributions. The discussion during this stage is about technical details if the issue is identified as necessary.
* 8/20-8/21: Conclusion for consensus.
* Till 8/26: TP phase after the consensus is reached.

**Issue 1-1 Working assumption confirmation**

2 companies propose to confirm the working assumption in last meeting. The corresponding agreements and working assumptions can be found in appendix.

***FL proposal:***

* ***Confirm the working assumptions (RAN1#101-e) about SL SCS and indication of granularity of the number of UL resources in PSBCH.***

**Comments 8/17-8/18**

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| **Company** | **Views** |
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**Issue 1-2 Specify the Rx side formula**

One company proposed to introduce the Rx side formula when indicating the UL resources in PSBCH, while some other companies do not think it necessary. The first stage in this meeting is to discuss about the necessity. Please provide your answers to the following questions in the table below.

**Questions:**

* **Q1**: Do you think the Tx side TDD indication in PSBCH mechanism (i.e. formulas) in current spec has any issue? If your answer is YES, please explain what kind of issue exists.
* **Q2**: For Q1 YES, do you think it necessary to introduce Rx side formula of the UL resource indication transformed from PSBCH? If your answer is YES, please explain the proposals (i.e. corresponding formula).

**Comments 8/17-8/18**

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| **Company** | **Views** |
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**Issue 1-3 Absence of TDD configurations in SIB1**

3 companies discuss about the case when *tdd-UL-DL-ConfigurationCommon* is not provided in SIB1, and how to derive/indicate *sl-TDD-Config* in PSBCH. This case can happen when UE is in the cell coverage of FDD or UE is OoC case.

**Questions:**

* **Q1**: Is it necessary to consider about the absence of TDD configuration in SIB1? Why?
* **Q2**: When it is absent, how to indicate/derive *sl-TDD-Config* in PSBCH? e.g. New RRC parameter, PHY indication method.

**Comments 8/17-8/18**

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| **Company** | **Views** |
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**Issue 1-5 UL slots location indication**

The current spec does not specify the locations of the indicated UL slots. By applying the Uu design, the UL slots should be also located at the last few slots in each TDD pattern.

**Questions:**

* **Q1**: Is it necessary to specify the indication of UL slots location? Why?

**Comments 8/17-8/18**

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| --- | --- |
| **Company** | **Views** |
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**Appendix**

RAN1#101-e

Agreements:

For indication of the UL slots by Z,

* If single pattern is configured, Z bits indicate the UL slot number in the pattern is n.
* If two patterns are configured, Z bits indicate the state index derived by the UL slots,

$$n=\left⌊\frac{n\_{2}}{w}\right⌋\*\left⌈\frac{P\*2^{μ}+1}{w}\right⌉+\left⌊\frac{n\_{1}}{w}\right⌋$$

Where

* *n*1 is the number of UL slots in the first pattern,
* $n\_{2}$*n*2 is the number of UL slots in the second pattern,
* $P$*P* is the periodicity in units of ms of the first pattern,
* w is the granularity of resource indication,
* $μ$μ is (working assumption)
* ~~Alt 1:~~ 0/1/2/3 corresponds to the 15/30/60/120 kHz SCS for SL respectively.
* ~~Alt 2: 2 corresponds to 60 kHz SCS for FR1, and 3 corresponds to 120kHz for FR2.~~

Agreeemnts:

For indication of the granularity of UL resources,

* If single pattern is configured, the granularity of the number of UL resources indicated by SL-TDD-Config is 1 slot.
* If two patterns are configured, the granularity of the number of UL resources indicated by SL-TDD-Config follows the table below (as a working assumption)

|  |  |  |  |
| --- | --- | --- | --- |
| Periodicity indication Y | P+P2 (ms) | Two patterns | Granularity in slots with different SCS |
| P | P2 | 15kHz | 30 kHz | 60 kHz | 120 kHz |
| 0 | 1 | 0.5 | 0.5 | 1 |
| 1 | 1.25 | 0.625 | 0.625 |
| 2 | 2 | 1 | 1 |
| 3 | 2.5 | 0.5 | 2 |
| 4 | 2.5 | 1.25 | 1.25 |
| 5 | 2.5 | 2 | 0.5 |
| 6 | 4 | 1 | 3 | 1 | 2 |
| 7 | 4 | 2 | 2 |
| 8 | 4 | 3 | 1 |
| 9 | 5 | 1 | 4 |
| 10 | 5 | 2 | 3 |
| 11 | 5 | 2.5 | 2.5 |
| 12 | 5 | 3 | 2 |
| 13 | 5 | 4 | 1 |
| 14 | 10 | 5 | 5 | 1 | 2 | 4 |
| 15 | 20 | 10 | 10 | 1 | 2 | 4 | 8 |