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

**Email discussion/approval regarding PSBCH content/TDD configuration indication**

* **Issue 1: Indication of TDD configuration**
* **Issue 2: SL-TDD-Config determination**
* **Issue 4: PSBCH contents and payload size (WAs confirmation)**

**By 5/29, with potential TP till 6/4 – Teng (CATT)**

**Issue 1 Indication of TDD configuration**

***FL Proposal:***

***Proposal 1: For indication of TDD configuration, the pattern(s) indication (X) and periodicity indication (Y) follows the two tables below:***

**Table 1. Periodicity indication Y with single TDD pattern (X=0)**

|  |  |  |
| --- | --- | --- |
| Periodicity indication Y | P (ms) | Single pattern |
|
| 0 | 0.5 | 0.5 |
| 1 | 0.625 | 0.625 |
| 2 | 1 | 1 |
| 3 | 1.25 | 1.25 |
| 4 | 2 | 2 |
| 5 | 2.5 | 2.5 |
| 6 | 4 | 4 |
| 7 | 5 | 5 |
| 8 | 10 | 10 |
| 9-15 | Reserved |

**Table 2. Periodicity indication Y with two TDD patterns (X=1)**

|  |  |  |
| --- | --- | --- |
| Periodicity indication Y | P+P2 (ms) | Two patterns |
| P | P2 |
| 0 | 1 | 0.5 | 0.5 |
| 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 |
| 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 |
| 15 | 20 | 10 | 10 |

***Proposal 2: 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.***

|  |  |  |  |
| --- | --- | --- | --- |
| 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 |

***Proposal 3: For indication of the UL slots by Z,***

* ***If single patter is configured, Z bits indicate the UL slots;***
* ***If two patterns are configured, Z bits indicate the state index derived by the UL slots.***

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| **Company** | **Views** |
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**Issue 2 SL-TDD-Config determination**

***FL Proposal: SL-TDD-Config in PSBCH is set to the same values in SIB provided by gNB***

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**Issue 4 PSBCH contents and payload size**

RAN1#99 meeting

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Working assumption:* PSBCH payload size is 56 bits including 24 bits of CRC.

Agreements:* Note: “green” already earlier; “blue” new agreements, “brown” working assumption, “change marks” for updates

|  |  |  |
| --- | --- | --- |
| **PSBCH contents** | **Number of bits** | **Notes** |
| DFN | 10 |  |
| Indication of TDD configuration | 12  | System-wide information, e.g. TDD-UL-DL common configuration and/or potential SL slots |
| Slot index | 7 | ~~Note: Up to 3 bits can be carried in DM-RS or in PBCH payload.~~ |
| In-coverage indicator | 1 |  |
| Reserve bits |  |  |
| CRC | 24 |  |
| Total bits | 56 |  |

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***FL Proposal: Confirm the working assumptions in RAN1#99 for the PSBCH contents for NR SL Rel-16, and reserve bits are 2***

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| **Company** | **Views** |
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