[100b-e-NR-5G\_V2X\_NRSL-PHYstructure-02]

Email discussion/approval on resource pool configuration - subchannel size and resource pool size

[100b-e-NR-5G\_V2X\_NRSL-PHYstructure-02] Email discussion/approval on resource pool configuration - subchannel size and resource pool size

 - A. Whether/how to introduce additional subchannel size and whether the number of PRBs configured for a resource pool should be integer multiple of sub-channel size

 till 4/24, with potential TP till 4/29 – Jeongho (SS)

This document has the following questions.

- A. Whether the number of PRBs configured for a resource pool should be integer multiple of sub-channel size?

- B. Whether/which new numbers is defined for a subchannel size?

# **A. Whether the number of PRBs configured for a resource pool should be integer multiple of sub-channel size?**

Based on the submitted contributions, there are the following alternatives and supporting companies.

* Alt A-1. All numbers of PRBs can be configured and a UE is not expected to use the last subchannel in Rel-16.
	+ [vivo], [OPPO], [Sony], [MediaTek], [TCL], [Apple], [Panasonic], [Qualcomm]
* Alt A-2. All number of PRBs can be configured and a different size is used for the last subchannel.
	+ [LGE], [Intel], [NTT DCM](assume the same PRBs for TBS determination)
* Alt A-3. Use only integer multiple of subchannel for the resource pool size.

Based on the contributions, the following proposal can be made.

*Proposal 1. For the size of resource pool, numbers of PRBs can be configured and a UE is not expected to use the last subchannel in Rel-16.*

Please share your views if Proposal 1 is agreeable or, if not, please share your views on the reason why it is not workable.

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| **Company** | **Views** |
| NTT DOCOMO | We are supportive of Alt A-2 and Alt A-3, but Alt A-1 is unclear for us.Let us ask question for Alt A-1: When all numbers of PRBs are (pre-)configured and the PRBs are not a multiple of sub-channel size, does UE need to do something on the remaining PRBs? Does not do anything? If UE does not anything, what is the motivation of Alt A-1? |
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# **B. Whether/which new numbers is defined for a subchannel size?**

Based on the submitted contributions, there are the following alternatives and supporting companies.

* Alt B-1. Introduce 11, 12, 13, 17, 19, 27, 53 PRBs as new subchannel sizes
	+ [Huawei, HiSilicon]
* Alt B-2. Introduce 4,5,6 as new subchannel size
	+ [LGE], [Ericsson], [Spreadtrum], [NEC]
* Alt B-3. No need to define a new size for a subchannel.

Please share your views on this issue and the reason of your views.

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| **Company** | **Views** |
| NTT DOCOMO | Support Alt B-3.We would like to support Alt B-2, while we are not sure whether decoding performance of PSCCH/2nd-stage SCI is sufficient. In addition, when sufficient PSCCH/2nd-stage SCI could lead to quite small number of REs for SL-SCH. If multiple sub-channels are used in typical case, the motivation of Alt B-2 will be lost. |
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