**3GPP TSG RAN WG1 #119 R1-241xxxx**

**Orlando, US, November 18th – 22nd, 2024**

**Source: Moderator (ZTE Corporation, Sanechips)**

**Title: FLS#1 on 2 candidate starting symbols in TS 38.213**

**Agenda item: 8.1**

**Document for: Discussion and Decision**

# Introduction

In this RAN1 meeting, a CR R1-2410456 [1] is submitted on the application condition of two candidate starting symbols in TS 38.213.

# Discussion

According to TS 38.214, two candidate starting symbols would be used only when (pre-)configuration of two starting symbols on a SL BWP is provided, otherwise legacy *sl-StartSymbol* should be used for PSSCH transmission

But the following text of current TS 38.213 may cause some misleading, and does not align with TS 38.214.

* Misleading 1: It implies that legacy *sl-StartSymbol* cannot be used for operation with shared spectrum.
* Misleading 2: Two candidate starting symbols would be always used for operation with shared spectrum regardless whether *sl-StartingSymbolFirst* and *sl-StartingSymbolSecond* areprovided.

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| Available slots for a resource pool are provided by *sl-TimeResource* and occur with a periodicity of 10240 ms. For operation without shared spectrum channel access and for an available slot without S-SS/PSBCH blocks, SL transmissions can start from a first symbol indicated by *sl-StartSymbol* and be within a number of consecutive symbols indicated by *sl-LengthSymbols*. For operation with shared spectrum channel access and for an available slot without S-SS/PSBCH blocks, SL transmissions can start from a first symbol indicated by *sl-StartingSymbolFirst* and be within a number of consecutive symbols indicated by *sl-LengthSymbols*, or from a second symbol indicated by *sl-StartingSymbolSecond* [6, TS 38.214], where the ending symbol of SL transmissions starting from the first symbol is same as the ending symbol of SL transmissions starting from the second symbol. For an available slot with S-SS/PSBCH blocks, the first symbol and the number of consecutive symbols are predetermined.  |

**2.1 Round-1**

The draft CR is shown as below:

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| 16 UE procedures for sidelink<Unchanged parts are omitted>For a resource pool within the SL BWP, - for operation without shared spectrum channel access, or for operation with shared spectrum channel access and when *sl-TransmissionStructureForPSCCHandPSSCH* = 'contiguousRB',the UE is provided by *sl-NumSubchannel* a number of sub-channels where each sub-channel includes a number of contiguous RBs provided by *sl-SubchannelSize*. The first RB of the first sub-channel in the SL BWP is indicated by *sl-StartRB-Subchannel* - for operation with shared spectrum channel access and when *sl-TransmissionStructureForPSCCHandPSSCH* = 'interlaceRB'*,* the UE is provided a number of sub-channels in each RB set which is equal to the number of interlaces in each RB set divided by the number of interlaces per sub-channel, provided by *sl-NumInterlacePerSubchannel*, and the interlaces have contiguous interlace indexes Available slots for a resource pool are provided by *sl-TimeResource* and occur with a periodicity of 10240 ms. For an available slot without S-SS/PSBCH blocks, SL transmissions can start from a first symbol indicated by *sl-StartSymbol* and be within a number of consecutive symbols indicated by *sl-LengthSymbols*. Except when *sl-StartingSymbolFirst* and *sl-StartingSymbolSecond* are provided for a SL-BWP, for operation with shared spectrum channel access and for an available slot without S-SS/PSBCH blocks, SL transmissions can start from a first symbol indicated by *sl-StartingSymbolFirst* and be within a number of consecutive symbols indicated by *sl-LengthSymbols*, or from a second symbol indicated by *sl-StartingSymbolSecond* [6, TS 38.214], where the ending symbol of SL transmissions starting from the first symbol is same as the ending symbol of SL transmissions starting from the second symbol. For an available slot with S-SS/PSBCH blocks, the first symbol and the number of consecutive symbols are predetermined. <Unchanged parts are omitted> |

**Please provide your views on the above CR:**

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| **Company** | **Agree? (Yes or no)** | **Comments**   |
| OPPO | No | Our understanding is aligned with the current spec description in TS 38.213, where* For operation without shared spectrum channel access in R18, there was no intention to change the starting symbol in a slot for SL transmission (since the WI objective is for SL-U operation). So, the UE behaviour remains the same as in R16/17.
* For operation with shared spectrum channel access and for an available slot without S-SS/PSBCH blocks, SL transmissions **can** start from a first symbol …, or from a second symbol …. The key word here is “**can**”. It does not mandate that *sl-StartingSymbolSecond* will always be configured. When *sl-StartingSymbolSecond* is configured, SL transmission from the first or the second starting symbol is still subject to LBT success/failure.
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# Conclusion

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# Reference

1. R1-2410456 Correction on the application condition of two candidate starting symbols in TS 38.213 ZTE Corporation, Sanechips