**3GPP TSG RAN WG1 #118 R1-240xxxxx**

**Maastricht, NL, August 19th – 23rd, 2024**

Agenda Item: 7

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Title: Summary on RRC parameter correction for SRS power control

Document for: Discussion/Decision

# Introduction

In this contribution, we provide some a summary on the discussion for RRC parameter correction for SRS power control based on the following draft CR for 38.214.

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| 6.2.1.2 UE sounding procedure for DL CSI acquisition<unrelated text omitted>The UE shall expect to be configured with the same number of SRS ports for all SRS resources in the SRS resource set(s) with higher layer parameter *usage* set as 'antennaSwitching'.In the case that more than one SRS resource set configured with *resourceType* in *SRS-ResourceSet* set to 'aperiodic', if a UE is provided *TCI-State* in *dl-OrJointTCI-StateList* or *TCI-UL-State,* the UE shall expect that the more than one sets are associated with the same values of the higher layer parameters *p0AlphaSetforSRS* and *pathlossReferenceRS* [6, TS 38.213]; otherwise, the UE shall expect that the more than one sets are configured with the same values of the higher layer parameters *alpha*, *p0*, *pathlossReferenceRS*, and *srs-PowerControlAdjustmentStates* in *SRS-ResourceSet*.<unrelated text omitted> |

# Discussion

During the online discussion, there are some comments on the wording on the statement “if a UE is provided *TCI-State* in *dl-OrJointTCI-StateList* or *TCI-UL-State*”, the text is based on the same sentence in current 38.213 as follows. There are some other comments that the association for the *p0AlphaSetforSRS* and *pathlossReferenceRS* and SRS resource set could be unclear. According to the text below in 38.213, such association is defined. 38.213 is also added as the reference for the “association” part.

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| In the remaining of this clause, if a UE is provided *TCI-State* in *dl-OrJointTCI-StateList* or *TCI-UL-State* and for an indicated *TCI-State* or *TCI-UL-State* as described in [6, TS 38.214] - in clauses 7.1.1, 7.2.1, and 7.3.1, the RS index $q\_{d}$ for obtaining the downlink pathloss estimate for PUSCH, PUCCH, and SRS transmission is provided by pathlossReferenceRS-Id-r17 associated with or included in the indicated *TCI-State* or *TCI-UL-State* except for SRS transmission that is not provided *followUnifiedTCI-StateSRS*- in clause 7.1.1, if *p0AlphaSetforPUSCH* is provided, the values of $P\_{O\\_UE\\_PUSCH,b,f,c}\left(j\right)$, $α\_{b,f,c}\left(j\right)$, and the PUSCH power control adjustment state $l$ are provided by *p0AlphaSetforPUSCH* associated with the indicated *TCI-State* or *TCI-UL-State*- in clause 7.2.1, if *p0AlphaSetforPUCCH* is provided, the values of $P\_{O\\_UE\\_PUCCH}\left(q\_{u}\right)$ and the PUCCH power control adjustment state $l$ are provided by *p0AlphaSetforPUCCH* associated with the indicated *TCI-State* or *TCI-UL-State*- in clause 7.3.1, if *p0AlphaSetforSRS* is provided, - if *followUnifiedTCI-StateSRS* is provided for a SRS resource set, the values of $P\_{O\\_UE\\_SRS,b,f,c}\left(q\_{s}\right)$, $α\_{SRS,b,f,c}\left(q\_{s}\right)$, and SRS power control adjustment state $l$ are provided by *p0AlphaSetforSRS* associated with the indicated *TCI-State* or *TCI-UL-State*- else, if *followUnifiedTCI-StateSRS* is not provided for a SRS resource set and for a SRS resource from the SRS resource set, the values of $P\_{O\\_UE\\_SRS,b,f,c}\left(q\_{s}\right)$, $α\_{SRS,b,f,c}\left(q\_{s}\right)$, and SRS power control adjustment state $l$ are provided by *p0AlphaSetforSRS* associated with *TCI-State* or *TCI-UL-State* of an SRS resource with lowest *SRS-ResourceId* in the SRS resource set and a RS index $q\_{d}$ for obtaining a pathloss estimate for the SRS transmission is provided by *pathlossReferenceRS-Id-r17* associated with or included in the *TCI-State* or *TCI-UL-State* of an SRS resource with lowest *SRS-ResourceId* in the SRS resource set$P\_{O\\_SRS,b,f,c}\left(q\_{s}\right)$ is the sum of the component $P\_{O\\_UE\\_SRS,b,f,c}\left(q\_{s}\right)$ and a component *p0* provided by *SRS-ResourceSet* corresponding to the SRS resource set. |

**Companies’ view**

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| Company | Comment |
| Samsung | Support |
| MediaTek | We are fine with the CR with the following modification to align with the wording used in current 214:6.2.1.2 UE sounding procedure for DL CSI acquisition<unrelated text omitted>The UE shall expect to be configured with the same number of SRS ports for all SRS resources in the SRS resource set(s) with higher layer parameter *usage* set as 'antennaSwitching'.In the case that more than one SRS resource set configured with *resourceType* in *SRS-ResourceSet* set to 'aperiodic', if a UE is provided *dl-OrJointTCI-StateList* or *TCI-UL-State,* the UE shall expect that the more than one sets are associated with the same values of the higher layer parameters *p0AlphaSetforSRS* and *pathlossReferenceRS* [6, TS 38.213]; otherwise, the UE shall expect that the more than one sets are configured with the same values of the higher layer parameters *alpha*, *p0*, *pathlossReferenceRS*, and *srs-PowerControlAdjustmentStates* in *SRS-ResourceSet*.<unrelated text omitted> |
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# Conclusion

TBA