**3GPP TSG-RAN WG2 Meeting #126R2-240xxxx**

**Fukuoka, Japan, 20th - 24th May, 2024**

**Agenda item:** 7.2.1

**Source:** CATT

**Title:** [Post126][406][POS] Rel-18 positioning LPP CR (CATT)

**Document for:** Discussion and Agreement

# 1 Introduction

This is to kick off the email discussion.

* [Post126][406][POS] Rel-18 positioning LPP CR (CATT)

 Scope: Update the CR in R2-2404434 in line with decisions of this meeting. Late-arriving parameter updates from RAN1 can be taken into account if possible.

 Intended outcome: Agreed CR in R2-2405883

 Deadline: Short (for RP)

# 2 Discussion

The CR is based on the AIP CR in R2-2404434. The updates are corrected within the name ‘RAN2#126’ in line with decisions of this meeting.

Please provide your comments on the updates named as ‘RAN2#126’ in the following table.

|  |  |  |
| --- | --- | --- |
| **Company** | **Clause No.** | **Comments** |
| Intel | 6.4.3 |  nr-DL-PRS-JointMeasurementRequest-r18 SEQUENCE { nr-DL-PRS-JointMeasurementRequestedPFL-List-r18 SEQUENCE (SIZE (2..3)) OF INTEGER (0..nrMaxFreqLayers-1-r16) OPTIONAL -- Need ON } OPTIONAL, -- Need ONI must miss something. There is only one field contained in nr-DL-PRS-JointMeasurementRequest, why should the high level field “nr-DL-PRS-JointMeasurementRequest” be added? Does that mean, the UE can be requested to perform joint measurement within the same PFL?[Rapp]: Thanks for the comments. According to the RRC parameter list, nr-DL-PRS-JointMeasurementRequest-r18 works for

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| --- | --- | --- |
| nr-aggregate-DL-FreqLayers | New | This field indicates whether to perform joint measurement across aggregated PFLs for Multi-RTT. |

And nr-DL-PRS-JointMeasurementRequestedPFL-List-r18 works for

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| --- | --- | --- | --- |
| nr-linked-DL-FreqLayerIndexList-PrsAggregation | New | Request from the LMF to the UE indicating which two or three PFLs to be used for performing joint measurement  | Up to three [DL-PRS-FreqLayerIndex] (potential new parameter, up to RAN2) values, each from INTEGER (0..nrMaxFreqLayers-1-r16)] |

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| Qualcomm | 6.5.11.4 | In the conditional presence table in *NR-DL-AoD-SignalMeasurementInformation* the following Rel-17 change is made:

| Conditional presence | Explanation |
| --- | --- |
| *rsrpp*  | The field is mandatory present if the field *nr-DL-PRS-FirstPathRSRP-ResultDiff-r17* is absent; otherwise it is optionally present, need ON. |
| *rsrp* | The field is mandatory present if the field *nr-DL-PRS-RSRP-ResultDiff-r17* is absent; otherwise it is optionally present, need ON. |

However, the current text is correct. I.e., either *nr-DL-PRS-RSRP-ResultDiff-r17* or *nr-DL-PRS-FirstPathRSRP-ResultDiff-r17* must be present. |
| Qualcomm | 6.4.3 | *NR-AggregatedDL-PRS-ResourceInfo-Element:*The *NR-DL-PRS-ResourceSetID-r16* is mandatory present. But the Set ID would be the same for all additional measurements? I think the set ID can also be OPTIONAL, but present in the first element.[Rapp]: Thanks for the comments. Yes, the Set ID would be the same for all additional measurements which is similar with legacy R16 report. Furthermore, both Set ID and Resource ID are optional in main measurement and additional measurement report in Rel-16, because the resource Set ID in main measurement still can be skipped if there is only one resource Set ID configured in this TRP. So I think it also applies to BW. I agree with the set ID can also be OPTIONAL, but not mandatory present even in the first element which is the same as Rel-16.  |
| Qualcomm |  | Comment above on conditional presence labels 'rsrp' and 'rsrpp' has been forgotten 😉[Rapp]: Thanks for the comments and done :). |
| Qualcomm |  | Typo in *NR-DL-PRS-MeasurementTimeWindowsConfig* field descriptions:***nr-MeasurementsToPerfromInTimeWindow***This field indicates the measurements that UE shall perform in the configured time window. If multiple bits are set to 1, then UE shall perform multiple measurements in the same time window.[Rapp]: Thanks for the comments and fix it in v02. |
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# 3 Conclusion

Based on company feedback, the following is proposed:

# 4 References