3GPP TSG-RAN WG2 Meeting #118-e ***R2-22xxxxx***

Electronic Meeting, May 9 – 20, 2022

**Agenda item:** 6.11.1 / 6.11.2.8

**Source:** Qualcomm Incorporated

**Title:** [Post118-e][603][POS] 37.355 positioning CR

**Document for:**  Discussion

# 1. Introduction

This document summarizes the following email discussion:

* [Post118-e][603][POS] 37.355 positioning CR (Qualcomm)

Scope: Update and check the CR in R2-2206247.

Intended outcome: Agreed CR

Deadline: Short (for RP)

##### References:

[1] R2-2205828, "Summary of LPP Updates and Open Issues".

[2] R2-2205829, "LPP Updates".

[3] R2-2206326, "Rel-17 LPP RIL".

[4] R2-2206327, "Rel-17 LPP ASN1 Review File".

[5] R2-2206328, "LPP Updates and ASN.1 Review".

[6] R2-2206247, "LPP Updates".

[7] R2-2206472, "Updated RAN1 UE features list for Rel-17 NR after RAN1 #109-e Week1", RAN1.

[8] R2-2206396, "37.355 CR for the positioning capabilities", Intel Corporation.

# 2. Discussion

The following updates to R2-2206247 have been made:

9. Update of RAN1 capabilities according to [AT118-e][627][POS] and R2-2206472

Deleted *ppw-durationOfPRS-Processing-r17*, FG 27-3-3 Component-2, since in [ ] in R2-2206472

*supportedDL-PRS-ProcessingSamples-RRC-Inactive-r17* is moved under *NR-DL-PRS-ProcessingCapability-r16* (instead of *PRS-ProcessingCapabilityPerBand-r16* (per UE))

maxMeasInstances-r17 is set to 256

maxCellIDsPerArea-r17 is set to 256

maxNrOfAreas-r17 is set to 16

maxTxTEG-Sets-r17 is set to 256

Deleted the Note with the Protection Level definition (moved to Stage 2)

Added *absoluteFrequencyPointA* and *offsetToPointA* to *NR-SRS-TxTEG-Element*

FFS, TBD, Editor's Notes deleted

Please provide your comments on "**Draft-R2-2205847\_(CR 37355 LPP Updates)\_v03.docx**" located in the same folder as this discussion document in the Table below.

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| --- | --- | --- |
| Company | LPP Section / IE | Comments |
| Huawei, HiSilicon | *CommonIEsRequestLocationInformation* | ***scheduledLocatioTime***  typo=> location |
|  | *LOS-NLOS-IndicatorGranularity2* | If we have *LOS-NLOS-IndicatorGranularity2, we may not need to have LOS-NLOS-IndicatorGranularity1? The overhead is not that large* |
|  | NR-DL-PRS-ExpectedAoD-or-AoA | NR-DL-PRS-ExpectedAoD-or-AoA-r17 ::= CHOICE {  expectedAoD-r17 SEQUENCE {  expectedDL-AzimuthAoD-r17 INTEGER (0..359),  expectedDL-AzimuthAoD-Unc-r17 INTEGER (0..60),  expectedDL-ZenithAoD-r17 INTEGER (0..180),  expectedDL-ZenithAoD-Unc-r17 INTEGER (0..30)  },  expectedAoA-r17 SEQUENCE {  expectedDL-AzimuthAoA-r17 INTEGER (0..359),  expectedDL-AzimuthAoA-Unc-r17 INTEGER (0..60),  expectedDL-ZenithAoA-r17 INTEGER (0..180),  expectedDL-ZenithAoA-Unc-r17 INTEGER (0..30)  }  }  RAN1 LS indicates that the uncertainty field can be optional as in R1-2205619  **Question 2**: Whether the uncertainty field for expected AoD (expected-DL-Azimuth-AoD-Unc and expected-DL-Zenith-AoD-Unc) and expected AoA (expected-DL-Azimuth-AoA-Unc and expected-DL-Zenith-AoA-Unc) can be optional?  **RAN1 Answer**: RAN1 assumes that the uncertainty field for the expected AoD (expected-DL-Azimuth-AoD-Unc and expected-DL-Zenith-AoD-Unc) and expected AoA (expected-DL-Azimuth-AoA-Unc and expected-DL-Zenith-AoA-Unc) can be optional under the condition that omitting the field means maximum uncertainty. |
|  | BeamPowerElement | We should mention in the field description that the nr-dl-prs-RelativePower and nr-dl-prs-RelativePowerFine that the UE shall ignore these two fields when received for the first element |
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