**3GPP TSG- WG3 Meeting #**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **38.473** | **CR** | **1027** | **rev** | **1** | **Current version:** | **17.1.0** |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network |  |

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|  |
| ***Title:***  | Correction to positioning gap configuration |
|  |  |
| ***Source to WG:*** | Google Inc. |
| ***Source to TSG:*** | RAN3 |
|  |  |
| ***Work item code:*** | NR\_pos\_enh |  | ***Date:*** | 2022-08-09 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-17 |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)…Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
|  |  |
| ***Reason for change:*** | 1. PosMeasGapPreConfigToReleaseList-r17 is defined in 38.331 v17.1.0 instead of PosMeasGapPreConfigToRemoveList-r17
2. In the current semantics description for PosMeasGapPreConfigList, PosMeasGapPreConfigToAddModList-r17 and PosMeasGapPreConfigToReleaseList-r17 can be included in PosMeasGapPreConfigList. However, the CU cannot identify whether the PosMeasGapPreConfigList contains only one or both of two IEs in accordance with 38.331.

The following is a *MeasGapConfig* IE from 38.331 v17.1.0.MeasGapConfig ::= SEQUENCE { gapFR2 SetupRelease { GapConfig } OPTIONAL, -- Need M ..., [[ gapFR1 SetupRelease { GapConfig } OPTIONAL, -- Need M gapUE SetupRelease { GapConfig } OPTIONAL -- Need M ]], [[ gapToAddModList-r17 SEQUENCE (SIZE (1..maxNrofGapId-r17)) OF GapConfig-r17 OPTIONAL, -- Need N gapToReleaseList-r17 SEQUENCE (SIZE (1..maxNrofGapId-r17)) OF MeasGapId-r17 OPTIONAL, -- Need N posMeasGapPreConfigToAddModList-r17 PosMeasGapPreConfigToAddModList-r17 OPTIONAL, -- Need N posMeasGapPreConfigToReleaseList-r17 PosMeasGapPreConfigToReleaseList-r17 OPTIONAL -- Need N ]]}**This CR is NBC.**  |
|  |  |
| ***Summary of change:*** | Modify the PosMeasGapPreConfigList IE with a sequence of two optional OCTET STRING IEs to include PosMeasGapPreConfigToAddModList-r17 with PosMeasGapPreConfigToReleaseList-r17 IE defined in 38.331, respectively.Impact Analysis:Impact assessment towards the previous version of the specification (same release): This CR has isolated impact with the previous version of the specification (same release).The impact can be considered isolated because the change only clarifies the positioning gap configuration. |
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| ***Consequences if not approved:*** | 1. The DU cannot release a positioning gap pattern because an incorrect RRC IE is referred.
2. The CU may not be able to decode the PosMeasGapPreConfigList including both PosMeasGapPreConfigToAddModList-r17 and PosMeasGapPreConfigToReleaseList-r17.
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| ***Clauses affected:*** | 9.1.12.31, 9.4.5 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** | Rev0: R3-224935Rev1: R3-22xxxxUpdate the changes based on the comments in the offline discussion in R3-224994 |

#### 9.2.12.31 MEASUREMENT PRECONFIGURATION CONFIRM

This message is sent by an gNB-DU to gNB-CU to confirm successful configuration of measurement gap or PRS processing window of the UE.

Direction: gNB-DU → gNB-CU.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| Message Type | M |  | 9.3.1.1 |  | YES | reject |
| gNB-CU UE F1AP ID | M  |  | 9.3.1.4 |  | YES | reject |
| gNB-DU UE F1AP ID  | M |  | 9.3.1.5 |  | YES | reject |
| PosMeasGapPreConfigList |  | 0..1 |  |  | YES | Ignore |
| >PosMeasGapPreConfigToAddModList | O |  | OCTET STRING | *PosMeasGapPreConfigToAddModList-r17* as defined in TS 38.331 [8] | YES | Ignore |
| >PosMeasGapPreConfigToReleaseList | O |  | OCTET STRING | *PosMeasGapPreConfigToReleaseList-r17* as defined in TS 38.331 [8] | YES | Ignore |
| Criticality Diagnostics | O |  | 9.3.1.3 |  | YES | ignore |

### 9.4.5 Information Element Definitions

-- ASN1START

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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-- Information Element Definitions

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<Unchanged text omitted>

PosMeasGapPreConfigList ::= SEQUENCE { posMeasGapPreConfigToAddModList OCTET STRING OPTIONAL,

 posMeasGapPreConfigToReleaseList OCTET STRING OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { PosMeasGapPreConfigList-ExtIEs} } OPTIONAL

}

PosMeasGapPreConfigList-ExtIEs F1AP-PROTOCOL-EXTENSION ::= {

 ...

}

MeasurementPeriodicity ::= ENUMERATED

{ms120, ms240, ms480, ms640, ms1024, ms2048, ms5120, ms10240, min1, min6, min12, min30, ..., ms20480, ms40960, extended }

MeasurementPeriodicityExtended ::= ENUMERATED {ms160, ms320, ms1280, ms2560, ms61440, ms81920, ms368640, ms737280, ms1843200, ...}

PosMeasurementQuantities ::= SEQUENCE (SIZE(1.. maxnoofPosMeas)) OF PosMeasurementQuantities-Item

PosMeasurementQuantities-Item ::= SEQUENCE {

 posMeasurementType PosMeasurementType,

 timingReportingGranularityFactor INTEGER (0..5) OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { PosMeasurementQuantities-ItemExtIEs} } OPTIONAL

}