**3GPP TSG-RAN5 Meeting #92-e *R5-21????***

**Electronic Meeting, 16th Aug– 27th Aug 2021**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.523-1** | **CR** | **????** | **rev** | **-** | **Current version:** | **16.8.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Correction to NR TC 7.1.1.3.8.1-PHR report with Intra-band Contiguous CA | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, HiSilicon | | | | | | | | | |
| ***Source to TSG:*** | R5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GS\_NR\_LTE-UEConTest | | | | |  | ***Date:*** | | | 2021-08-12 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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 can be 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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| Reason for change: | | 1, According to 38.321, add activation of an SCell of any MAC entity with configured uplink will trigger PHR, therefore SCELL should configure UL pusch-config (currently the default configuration in TS 38.508-1 is ServingCellConfig with condition **No\_UL**).  2, Unlike the pusch-config, there is no need to config pucch-config, so that for UEs which does not support twoPUCCH-Group(PUCCH-SCELL), this test case can be applicable too. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1, Add UL configuration for SCell to config PUSCH and no PUCCH. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | A Conformant UE may fail the TC. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.1.1.3.8.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

**<Start of modified section 1>**

##### 7.1.1.3.8 UE power headroom reporting / SCell activation / DL pathloss change reporting

###### 7.1.1.3.8.1 UE power headroom reporting / SCell activation / DL pathloss change reporting/ Intra-band Contiguous CA

7.1.1.3.8.1.1 Test Purpose (TP)

(1)

**with** { UE in RRC\_Connected state with multiple Power headroom reporting and an SCell with uplink is configured }

**ensure that** {

**when** { *UE receives an Activation MAC Control Element activating the SCell* }

**then** { UE transmits a MAC PDU containing Power Headroom Report MAC Control Element including PH type1 for SpCell and Scell }

}

(2)

**with** { UE in RRC\_Connected state with multiple Power headroom reporting for phr-dl-PathlossChange configured }

**ensure that** {

**when** { *the DL Pathloss changes and phr-ProhibitTimer is running*  }

**then** { UE does not transmit a MAC PDU containing Power Headroom Report MAC Control Element including PH type1 for SpCell and Scell }

}

(3)

**with** { UE in RRC\_Connected state with Power headroom reporting for phr-dl-PathlossChange configured }

**ensure that** {

**when** { phr-ProhibitTimer expires and power headroom report is triggered due to DL Pathloss change }

**then** { UE transmits a MAC PDU containing Power Headroom Report MAC Control Element including PH type1 for SpCell and Scell }

}

7.1.1.3.8.1.2 Conformance requirements

References: The conformance requirements covered in the current TC are specified in: TS 38.321 clause 5.4.6 and 6.1.3.8. Unless otherwise stated these are Rel-15 requirements.

[TS 38.321, clause 5.4.6]

The Power Headroom reporting procedure is used to provide the serving gNB with the following information:

- Type 1 power headroom: the difference between the nominal UE maximum transmit power and the estimated power for UL-SCH transmission per activated Serving Cell;

- Type 2 power headroom: the difference between the nominal UE maximum transmit power and the estimated power for UL-SCH and PUCCH transmission on SpCell of the other MAC entity (i.e. E-UTRA MAC entity in EN-DC, NE-DC, and NGEN-DC cases);

- Type 3 power headroom: the difference between the nominal UE maximum transmit power and the estimated power for SRS transmission per activated Serving Cell.

RRC controls Power Headroom reporting by configuring the following parameters:

- *phr-PeriodicTimer*;

- *phr-ProhibitTimer*;

- *phr-Tx-PowerFactorChange*;

- *phr-Type2OtherCell*;

- *phr-ModeOtherCG*;

- *multiplePHR*.

A Power Headroom Report (PHR) shall be triggered if any of the following events occur:

- *phr-ProhibitTimer* expires or has expired and the path loss has changed more than *phr-Tx-PowerFactorChange* dB for at least one activated Serving Cell of any MAC entity which is used as a pathloss reference since the last transmission of a PHR in this MAC entity when the MAC entity has UL resources for new transmission;

NOTE 1: The path loss variation for one cell assessed above is between the pathloss measured at present time on the current pathloss reference and the pathloss measured at the transmission time of the last transmission of PHR on the pathloss reference in use at that time, irrespective of whether the pathloss reference has changed in between.

- *phr-PeriodicTimer* expires;

- upon configuration or reconfiguration of the power headroom reporting functionality by upper layers, which is not used to disable the function;

- activation of an SCell of any MAC entity with configured uplink;

- addition of the PSCell (i.e. PSCell is newly added or changed);

- *phr-ProhibitTimer* expires or has expired, when the MAC entity has UL resources for new transmission, and the following is true for any of the activated Serving Cells of any MAC entity with configured uplink:

- there are UL resources allocated for transmission or there is a PUCCH transmission on this cell, and the required power backoff due to power management (as allowed by P-MPRc as specified in TS 38.101-1 [14], TS 38.101-2 [15], and TS 38.101-3 [16]) for this cell has changed more than *phr-Tx-PowerFactorChange* dB since the last transmission of a PHR when the MAC entity had UL resources allocated for transmission or PUCCH transmission on this cell.

NOTE 2: The MAC entity should avoid triggering a PHR when the required power backoff due to power management decreases only temporarily (e.g. for up to a few tens of milliseconds) and it should avoid reflecting such temporary decrease in the values of PCMAX,f,c/PH when a PHR is triggered by other triggering conditions.

If the MAC entity has UL resources allocated for a new transmission the MAC entity shall:

1> if it is the first UL resource allocated for a new transmission since the last MAC reset:

2> start *phr-PeriodicTimer*;

1> if the Power Headroom reporting procedure determines that at least one PHR has been triggered and not cancelled; and

1> if the allocated UL resources can accommodate the MAC CE for PHR which the MAC entity is configured to transmit, plus its subheader, as a result of LCP as defined in clause 5.4.3.1:

2> if *multiplePHR* with value *true* is configured:

3> for each activated Serving Cell with configured uplink associated with any MAC entity:

4> obtain the value of the Type 1 or Type 3 power headroom for the corresponding uplink carrier as specified in clause 7.7 of TS 38.213 [6] for NR Serving Cell and clause 5.1.1.2 of TS 36.213 [17] for E-UTRA Serving Cell;

4> if this MAC entity has UL resources allocated for transmission on this Serving Cell; or

4> if the other MAC entity, if configured, has UL resources allocated for transmission on this Serving Cell and *phr-ModeOtherCG* is set to *real* by upper layers:

5> obtain the value for the corresponding PCMAX,f,c field from the physical layer.

3> if *phr-Type2OtherCell* with value *true* is configured:

4> if the other MAC entity is E-UTRA MAC entity:

5> obtain the value of the Type 2 power headroom for the SpCell of the other MAC entity (i.e. E-UTRA MAC entity);

5> if *phr-ModeOtherCG* is set to *real* by upper layers:

6> obtain the value for the corresponding PCMAX,f,c field for the SpCell of the other MAC entity (i.e. E-UTRA MAC entity) from the physical layer.

3> instruct the Multiplexing and Assembly procedure to generate and transmit the Multiple Entry PHR MAC CE as defined in clause 6.1.3.9 based on the values reported by the physical layer.

2> else (i.e. Single Entry PHR format is used):

3> obtain the value of the Type 1 power headroom from the physical layer for the corresponding uplink carrier of the PCell;

3> obtain the value for the corresponding PCMAX,f,c field from the physical layer;

3> instruct the Multiplexing and Assembly procedure to generate and transmit the Single Entry PHR MAC CE as defined in clause 6.1.3.8 based on the values reported by the physical layer.

2> start or restart *phr-PeriodicTimer*;

2> start or restart *phr-ProhibitTimer*;

2> cancel all triggered PHR(s).

[TS 38.321, clause 6.1.3.9]

The Multiple Entry PHR MAC CE is identified by a MAC subheader with LCID as specified in Table 6.2.1-2.

It has a variable size, and includes the bitmap, a Type 2 PH field and an octet containing the associated PCMAX,f,c field (if reported) for SpCell of the other MAC entity, a Type 1 PH field and an octet containing the associated PCMAX,f,c field (if reported) for the PCell. It further includes, in ascending order based on the *ServCellIndex*, one or multiple of Type X PH fields and octets containing the associated PCMAX,f,c fields (if reported) for Serving Cells other than PCell indicated in the bitmap. X is either 1 or 3 according to TS 38.213 [6] and TS 36.213 [17].

The presence of Type 2 PH field for SpCell of the other MAC entity is configured by *phr-Type2OtherCell* with value *true*.

A single octet bitmap is used for indicating the presence of PH per Serving Cell when the highest *ServCellIndex* of Serving Cell with configured uplink is less than 8, otherwise four octets are used.

The MAC entity determines whether PH value for an activated Serving Cell is based on real transmission or a reference format by considering the configured grant(s) and downlink control information which has been received until and including the PDCCH occasion in which the first UL grant for a new transmission that can accommodate the MAC CE for PHR as a result of LCP as defined in clause 5.4.3.1 is received since a PHR has been triggered if the PHR MAC CE is reported on an uplink grant received on the PDCCH or until the first uplink symbol of PUSCH transmission minus PUSCH preparation time as defined in clause 7.7 of TS 38.213 [6] if the PHR MAC CE is reported on a configured grant.

For a band combination in which the UE does not support dynamic power sharing, the UE may omit the octets containing Power Headroom field and PCMAX,f,c field for Serving Cells in the other MAC entity except for the PCell in the other MAC entity and the reported values of Power Headroom and PCMAX,f,c for the PCell are up to UE implementation.

The PHR MAC CEs are defined as follows:

- Ci: This field indicates the presence of a PH field for the Serving Cell with *ServCellIndex* i as specified in TS 38.331 [5]. The Ci field set to 1 indicates that a PH field for the Serving Cell with *ServCellIndex* i is reported. The Ci field set to 0 indicates that a PH field for the Serving Cell with *ServCellIndex* i is not reported;

- R: Reserved bit, set to 0;

- V: This field indicates if the PH value is based on a real transmission or a reference format. For Type 1 PH, the V field set to 0 indicates real transmission on PUSCH and the V field set to 1 indicates that a PUSCH reference format is used. For Type 2 PH, the V field set to 0 indicates real transmission on PUCCH and the V field set to 1 indicates that a PUCCH reference format is used. For Type 3 PH, the V field set to 0 indicates real transmission on SRS and the V field set to 1 indicates that an SRS reference format is used. Furthermore, for Type 1, Type 2, and Type 3 PH, the V field set to 0 indicates the presence of the octet containing the associated PCMAX,f,c field, and the V field set to 1 indicates that the octet containing the associated PCMAX,f,c field is omitted;

- Power Headroom (PH): This field indicates the power headroom level. The length of the field is 6 bits. The reported PH and the corresponding power headroom levels are shown in Table 6.1.3.8-1 (the corresponding measured values in dB for the NR Serving Cell are specified in TS 38.133 [11] while the corresponding measured values in dB for the E-UTRA Serving Cell are specified in TS 36.133 [12]);

- P: This field indicates whether the MAC entity applies power backoff due to power management (as allowed by P-MPRc as specified in TS 38.101-1 [14], TS 38.101-2 [15], and TS 38.101-3 [16]). The MAC entity shall set the P field to 1 if the corresponding PCMAX,f,c field would have had a different value if no power backoff due to power management had been applied;

- PCMAX,f,c: If present, this field indicates the PCMAX,f,c (as specified in TS 38.213 [6]) for the NR Serving Cell and the PCMAX,c or P̃CMAX,c (as specified in TS 36.213 [17]) for the E-UTRA Serving Cell used for calculation of the preceding PH field. The reported PCMAX,f,c and the corresponding nominal UE transmit power levels are shown in Table 6.1.3.8-2 (the corresponding measured values in dBm for the NR Serving Cell are specified in TS 38.133 [11] while the corresponding measured values in dBm for the E-UTRA Serving Cell are specified in TS 36.133 [12]).



Figure 6.1.3.9-1: Multiple Entry PHR MAC CE with the highest *ServCellIndex* of Serving Cell with configured uplink is less than 8

7.1.1.3.8.1.3 Test description

7.1.1.3.8.1.3.1 Pre-test conditions

Same Pre-test conditions as in clause 7.1.1.0 except that Test loop function(*Off*) System information combination NR-4 and in addition NR Cell 3 is configured as NR Active Scell.

7.1.1.3.8.1.3.2 Test procedure sequence

Table 7.1.1.3.8.1.3.2-0: Cell configuration power level changes over time for FR1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Parameter | Unit | NR Cell 1 | NR Cell 3 | Remarks |
| **T0** | Cell-specific RS EPRE | dBm/SCS | -88 | -88 |  |
| **T1** | Cell-specific RS EPRE | dBm/SCS | -99 | -88 |  |
| **T2** | Cell-specific RS EPRE | dBm/SCS | -88 | -88 |  |
| **T3** | Cell-specific RS EPRE | dBm/SCS | -88 | -99 |  |
| **T4** | Cell-specific RS EPRE | dBm/SCS | -88 | -88 |  |

Table 7.1.1.3.8.1.3.2-0A: Cell configuration power level changes over time for FR2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Parameter | Unit | NR Cell 1 | NR Cell 3 | Remarks |
| **T0** | Cell-specific RS EPRE | dBm/SCS | -82 | -82 |  |
| **T1** | Cell-specific RS EPRE | dBm/SCS | -91 | -82 |  |
| **T2** | Cell-specific RS EPRE | dBm/SCS | -82 | -82 |  |
| **T3** | Cell-specific RS EPRE | dBm/SCS | -82 | -91 |  |
| **T4** | Cell-specific RS EPRE | dBm/SCS | -82 | -82 |  |

Table 7.1.1.3.8.1.3.2-1: Main behaviour

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| St | Procedure | Message Sequence | | TP | Verdict |
|  |  | U - S | Message |  |  |
| 1 | SS transmits an RRCReconfiguration message toconfigure SCell (NR Cell 3). Note 1 | <-- | RRCReconfiguration | - | - |
| 2 | The UE transmits RRCReconfigurationComplete message. Note 2 | --> | RRCReconfigurationComplete | - | - |
| 3 | The SS is configured for Uplink Grant Allocation Type 2. SS is configured to transmit UL grant for UE at every 10 ms. | - | - | - | - |
| 4 | SS transmits an RRCReconfiguration message to provide Power Headroom parameters. Note 1 | <-- | RRCReconfiguration | - | - |
|  | EXCEPTION: In parallel with step 5, UE executes parallel behaviour defined in Table 7.1.1.3.8.1.3.2-2 | - | *-* | - | - |
| 5 | The UE transmits RRCReconfigurationComplete message to confirm the setup of Power Headroom parameters. Note 2 | --> | RRCReconfigurationComplete | - | - |
| 6 | The SS transmits an Activation MAC control element to activate SCell. | <-- | MAC PDU (SCell Activation/Deactivation MAC CE of one octet (C1=1)) | - | - |
| 7 | Check: Does the UE transmit a MAC PDU containing Multiple Entry PHR MAC CE containing Type 1 PH of NR SpCell and Scell? Note 3 | --> | MAC PDU | 1 | P |
| 8 | Void | - | - | - | - |
| 9 | SS adjusts cell levels according to row T1 of Table 7.1.1.3.8.3.1.2-0/0A. | - | - | - | - |
| 10 | Check: For 80% of *prohibitPHR-Timer* since step 7, does the UE transmit a MAC PDU containing Multiple Entry PHR MAC CE? | --> | MAC PDU | 2 | F |
| 11 | Check: After *prohibitPHR-Timer* after step 7, does the UE transmit a MAC PDU containing Multiple Entry PHR MAC CE containing Type 1 PH of NR SpCell and Scell? Note 3 | --> | MAC PDU | 3 | P |
| 12 | SS adjusts cell levels according to row T2 of Table 7.1.1.3.8.1.3.2-0/0A. | - | - | - | - |
| 13 | Check: For 80% of *prohibitPHR-Timer* since step 11, does the UE transmit a MAC PDU containing Multiple Entry PHR MAC CE ? | --> | MAC PDU | 2 | F |
| 14 | Check: After *prohibitPHR-Timer* after step 11, does the UE transmit a MAC PDU containing Multiple Entry PHR MAC CE containing Type 1PH of NR SpCell and Scell? Note 3 | --> | MAC PDU | 3 | P |
| 15 | SS adjusts cell levels according to row T3 of Table 7.1.1.3.8.1.3.2-0/0A. | - | - | - | - |
| 16 | Check: For 80% of *prohibitPHR-Timer* since step 14, does the UE transmit a MAC PDU containing Multiple Entry PHR MAC CE containing? | --> | MAC PDU | 2 | F |
| 17 | Check: After *prohibitPHR-Timer* after step 14, does the UE transmit a MAC PDU containing Multiple Entry PHR MAC CE containing Type 1 PH of NR SpCell and Scell? Note 3 | --> | MAC PDU | 3 | P |
| 18 | SS adjusts cell levels according to row T4 of Table 7.1.1.3.8.1.3.2-0/0A. | - | - | - | - |
| 19 | Check: For 80% of *prohibitPHR-Timer* since step 17, does the UE transmit a MAC PDU containing Multiple Entry PHR MAC CE? | --> | MAC PDU | 2 | F |
| 20 | Check: After *prohibitPHR-Timer* after step 17, does the UE transmit a MAC PDU containing Multiple Entry PHR MAC CE containing Type 1 PH of NR SpCell and Scell? Note 3 | --> | MAC PDU | 3 | P |
| 21 | The SS transmits an NR *RRCReconfiguration* message to disable Power Headroom reporting.(Note 1) | <-- | *(RRCReconfiguration)* | - | - |
| 22 | The UE transmits an NR *RRCReconfigurationComplete* message to confirm the disabling of Power Headroom parameters.(Note 3) | --> | *(RRCReconfigurationComplete)* | - | - |
| Note 1: For EN-DC the NR *RRCReconfiguration* message is contained in *RRCConnectionReconfiguration.*  Note 2: For EN-DC the NR *RRCReconfigurationComplete* message is contained in *RRCConnectionReconfigurationComplete.*  Note 3: For EN-DC the Type 1 PHR report for EUTRA Pcell is also included. | | | | | |

Table 7.1.1.3.8.1.3.2-2: Parallel behaviour

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| St | Procedure | Message Sequence | | TP | Verdict |
|  |  | U - S | Message |  |  |
| 1 | The UE transmits a MAC PDU containing Multiple Entry PHR MAC CE containing Type 1 PH of NR SpCell. | --> | MAC PDU | - | - |

7.1.1.3.8.1.3.3 Specific message contents

Table 7.1.1.3.8.1.3.3-1: *RRCReconfiguration* (step 1, Table 7.1.1.3.8.1.3.2-1)

|  |  |  |  |
| --- | --- | --- | --- |
| Derivation Path: TS 38.508-1 [4], Table 4.6.1-13. | | | |
| Information Element | | Value/remark | Comment | Condition |
| RRCReconfiguration ::= SEQUENCE { | |  |  |  |
| criticalExtensions CHOICE { | |  |  |  |
| c1 CHOICE { | |  |  |  |
| rrcReconfiguration ::= SEQUENCE { | |  |  |  |
| secondaryCellGroup | | CellGroupConfig | OCTET STRING (CONTAINING CellGroupConfig) | EN-DC |
| nonCriticalExtension SEQUENCE { | |  |  | NR |
| masterCellGroup | | CellGroupConfig | OCTET STRING (CONTAINING CellGroupConfig) |  |
| } | |  |  |  |
| } | |  |  |  |
| } | |  |  |  |
| } | |  |  |  |
| } | |  |  |  |

Table 7.1.1.3.8.1.3.3-2: CellGroupConfig (Table 7.1.1.3.8.1.3.3-1)

|  |  |  |  |
| --- | --- | --- | --- |
| Derivation Path: TS 38.508-1 [4], Table 4.6.3-19. | | | |
| Information Element | | Value/remark | Comment | Condition |
| CellGroupConfig ::= SEQUENCE { | |  |  |  |
| sCellToAddModList SEQUENCE (SIZE (1..maxMeasId)) OF SCellConfig { | | 1 entry |  |  |
| SCellConfig[1] SEQUENCE { | |  | entry 1 |  |
| sCellIndex | | SCellIndex as per TS 38.508-1 [4] table 4.6.3-154 |  |  |
| sCellConfigCommon | | ServingCellConfigCommon |  |  |
| sCellConfigDedicated | | ServingCellConfig |  |  |
| } | |  |  |  |
| } | |  |  |  |

Table 7.1.1.3.8.1.3.3-3: ServingCellConfigCommon (Table 7.1.1.3.8.1.3.3-2)

|  |  |  |  |
| --- | --- | --- | --- |
| Derivation Path: TS 38.508-1 [4], Table 4.6.3-168. | | | |
| Information Element | Value/remark | Comment | Condition |
| ServingCellConfigCommon ::= SEQUENCE { |  |  |  |
| physCellId | Physical Cell Identity of NR Cell 3 |  |  |
| } |  |  |  |

Table 7.1.1.3.8.1.3.3-3A: Void

Table 7.1.1.3.8.1.3.3-4: *RRCReconfiguration* ( Step 4, Table 7.1.1.3.8.1.3.2-1)

|  |  |  |  |
| --- | --- | --- | --- |
| Derivation Path: 38.508-1 [4], Table 4.6.1-13 | | | |
| Information Element | Value/remark | Comment | Condition |
| RRCReconfiguration ::= SEQUENCE { |  |  |  |
| criticalExtensions CHOICE { |  |  |  |
| rrcReconfiguration SEQUENCE { |  |  |  |
| secondaryCellGroup | CellGroupConfig | OCTET STRING (CONTAINING CellGroupConfig) | EN-DC |
| nonCriticalExtension SEQUENCE { |  |  | NR |
| masterCellGroup | CellGroupConfig | OCTET STRING (CONTAINING CellGroupConfig) |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |

Table 7.1.1.3.8.1.3.3-5: CellGroupConfig (Table 7.1.1.3.8.1.3.3-4)

|  |  |  |  |
| --- | --- | --- | --- |
| Derivation Path: 38.508-1 [4], Table 4.6.3-19 | | | |
| Information Element | Value/remark | Comment | Condition |
| CellGroupConfig::= SEQUENCE { |  |  |  |
| cellGroupId | CellGroupId as per TS 38.508-1 [4] table 4.6.3-20 |  |  |
| mac-CellGroupConfig SEQUENCE { |  |  |  |
| phr-Config CHOICE { |  |  |  |
| setup SEQUENCE { |  |  |  |
| phr-PeriodicTimer | infinity |  |  |
| phr-ProhibitTimer | sf1000 |  |  |
| phr-Tx-PowerFactorChange | 3db |  |  |
| multiplePHR | true |  |  |
| dummy | true |  |  |
| phr-Type2OtherCell | false |  |  |
| phr-ModeOtherCG | real |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |

Table 7.1.1.3.8.1.3.3-6: ServingCellConfig (Table 7.1.1.3.8.1.3.3-2)

|  |  |  |  |
| --- | --- | --- | --- |
| Derivation Path: TS 38.508-1 [4], Table 4.6.3-167. | | | |
| Information Element | Value/remark | Comment | Condition |
| ServingCellConfig ::= SEQUENCE { |  |  |  |
| uplinkConfig SEQUENCE { |  |  |  |
| initialUplinkBWP | BWP-UplinkDedicated |  |  |
| } |  |  |  |
| } |  |  |  |

Table 7.1.1.3.8.1.3.3-7: *BWP-UplinkDedicated*(Table 7.1.1.3.8.1.3.3-6)

|  |  |  |  |
| --- | --- | --- | --- |
| Derivation Path: TS 38.508-1 [4], Table 4.6.3-15 | | | |
| Information Element | Value/remark | Comment | Condition |
| BWP-UplinkDedicated ::= SEQUENCE { |  |  |  |
| pucch-Config | Not present |  |  |
| } |  |  |  |

Table 7.1.1.3.8.1.3.3-8: ServingCellConfigCommon (Table 7.1.1.3.8.1.3.3-2)

|  |  |  |  |
| --- | --- | --- | --- |
| Derivation Path: TS 38.508-1 [4], Table 4.6.3-168. | | | |
| Information Element | Value/remark | Comment | Condition |
| ServingCellConfigCommon ::= SEQUENCE { |  |  |  |
| physCellId | Physical Cell Identity of NR Cell 3 |  |  |
| uplinkConfigCommon | UplinkConfigCommon |  |  |
| } |  |  |  |

**<End of modified section 1>**