**3GPP TSG-RAN5 Meeting #94-e *R5-22XXXX***

**Electronic Meeting, 21st Feb 2022 - 4th Mar 2022**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.523-1** | **CR** |  | **rev** | **-** | **Current version:** | **16.10.0** |  |
|  | | | | | | | | |
| *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 |  | Core Network |  |

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|  | | | | | | | | | | |
| ***Title:*** | Update of NR Immediate MDT TC 8.1.6.2.3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | MediaTek Inc. | | | | | | | | | |
| ***Source to TSG:*** | R5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_SON\_MDT-UEConTest | | | | |  | ***Date:*** | | | 2022-01-17 |
|  |  | | | |  | |  | | |  |
| ***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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | 1. In step 7 the UE is ordered to perform handover but no RRC security, SRB2 or DRB is configured therefore the UE will perform a connection re-establishment. 2. In step12 there is no need for PDU session modification as that is only applicable for PDU sessions carried over from E-UTRA and this is mentioned in 38.508-1/4.5A.2C.1:   “The purpose of this procedure is to handle UE-requested PDU session modification after the first S1 to N1 mode change”   1. RRC security and SRB2 needs to be established before the UE information procedure | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1. Added steps to establish security, SRB2 and DRB in E-UTRA. 2. Removed 38.508-1/4.5A.2C.1 3. Added procedure to establish RRC security and SRB2+ DRBs | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | A conformant UE will fail the test case. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 8.1.6.2.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

##### 8.1.6.2.3 Inter-RAT MDT / Radio Link Failure / Reporting at E-UTRA Inter-RAT handover

8.1.6.2.3.1 Test Purpose (TP)

(1)

**with** {UE selects the E-UTRA cell after detection of radio link failure in NR cell }

**ensure that** {  
 **when** { UE receives a HANDOVER FROM E-UTRA COMMAND message }

**then** { UE transmits an RRCReconfigurationComplete message containing rlf-InfoAvailable and enters NR RRC\_CONNECTED state }

}

(2)

**with** { UE in RRC\_CONNECTED having reported that the UE has radio link failure information available }

**ensure that** {  
 **when** {UE receives the UEInformationRequest message containing rlf-ReportReq }

**then** { UE sends the UEInformationResponse message containing the measurement result for E-UTRA neighbour cell }

}

8.1.6.2.3.2 Conformance requirements

References: The conformance requirements covered in the present TC are specified in: TS 38.331, clauses 5.3.10.5, 5.4.2.3, 5.3.5.3, and 5.7.10.3. Unless otherwise stated these are Rel-16 requirements.

[TS 38.331, clause 5.3.10.5]

The UE shall determine the content in the *VarRLF-Report* as follows:

1> clear the information included in *VarRLF-Report*, if any;

1> set the *plmn-IdentityList* to include the list of EPLMNs stored by the UE (i.e. includes the RPLMN);

…

1> for each of the configured *measObjectNR* in which measurements are available:

2> if the SS/PBCH block-based measurement quantities are available:

3> set the *measResultListNR* in *measResultNeighCells* to include all the available measurement quantities of the best measured cells, other than the source PCell(in case HO failure) or PCell (in case RLF), ordered such that the cell with highest SS/PBCH block RSRP is listed first if SS/PBCH block RSRP measurement results are available, otherwise the cell with highest SS/PBCH block RSRQ is listed first if SS/PBCH block RSRQ measurement results are available, otherwise the cell with highest SS/PBCH block SINR is listed first, based on the available SS/PBCH block based measurements collected up to the moment the UE detected failure;

4> for each neighbour cell included, include the optional fields that are available;

2> if the CSI-RS based measurement quantities are available:

3> set the *measResultListNR* in *measResultNeighCells* to include all the available measurement quantities of the best measured cells, other than the source PCell, ordered such that the cell with highest CSI-RS RSRP is listed first if CSI-RS RSRP measurement results are available, otherwise the cell with highest CSI-RS RSRQ is listed first if CSI-RS RSRQ measurement results are available, otherwise the cell with highest CSI-RS SINR is listed first, based on the available CSI-RS based measurements collected up to the moment the UE detected radio link failure;

4> for each neighbour cell included, include the optional fields that are available;

1> for each of the configured EUTRA frequencies in which measurements are available;

2> set the *measResultListEUTRA* in *measResultNeighCells* to include the best measured cells ordered such that the cell with highest RSRP is listed first if RSRP measurement results are available, otherwise the cell with highest RSRQ is listed first, and based on measurements collected up to the moment the UE detected failure;

3> for each neighbour cell included, include the optional fields that are available;

NOTE 1: The measured quantities are filtered by the L3 filter as configured in the mobility measurement configuration. The measurements are based on the time domain measurement resource restriction, if configured. Blacklisted cells are not required to be reported.

…

1> else if the failure is detected due to radio link failure as described in 5.3.10.3, set the fields in *VarRLF-report* as follows:

2> set the *connectionFailureType* to *rlf*;

2> set the *rlf-Cause* to the trigger for detecting radio link failure in accordance with clause 5.3.10.4;

2> set the *nrFailedPCellId* in *failedPCellId* to the global cell identity and the tracking area code, if available, and otherwise to the physical cell identity and carrier frequency of the PCell where radio link failure is detected;

2> if an *RRCReconfiguration* message including the *reconfigurationWithSync* was received before the connection failure:

3> if the last *RRCReconfiguration* message including the *reconfigurationWithSync* concerned an intra NR handover:

4> include the *nrPreviousCell* in *previousPCellId* and set it to the global cell identity and the tracking area code of the PCell where the last *RRCReconfiguration* message including *reconfigurationWithSync* was received;

4> set the *timeConnFailure* to the elapsed time since reception of the last *RRCReconfiguration* message including the *reconfigurationWithSync*;

3> else if the last *RRCReconfiguration* message including the *reconfigurationWithSync* concerned a handover to NR from E-UTRA and if the UE supports Radio Link Failure Report for Inter-RAT MRO EUTRA:

4> include the *eutraPreviousCell* in *previousPCellId* and set it to the global cell identity and the tracking area code of the E-UTRA PCell where the last *RRCReconfiguration* message including *reconfigurationWithSync* was received embedded in E-UTRA RRC message *MobilityFromEUTRACommand* message as specified in TS 36.331 [10] clause 5.4.3.3;

4> set the *timeConnFailure* to the elapsed time since reception of the last *RRCReconfiguration* message including the *reconfigurationWithSync* embedded in E-UTRA RRC message *MobilityFromEUTRACommand* message as specified in TS 36.331 [10] clause 5.4.3.3;

…

[TS 38.331, clause 5.4.2.3]

The UE shall:

1> apply the default L1 parameter values as specified in corresponding physical layer specifications except for the parameters for which values are provided in *SIB1*;

1> apply the default MAC Cell Group configuration as specified in 9.2.2;

1> perform RRC reconfiguration procedure as specified in 5.3.5;

NOTE: If the UE is connected to 5GC of the source E-UTRA cell, the delta configuration for PDCP and SDAP can be used for intra-system inter-RAT handover. For other cases, source RAT configuration is not considered when the UE applies the reconfiguration message of target RAT.

[TS 38.331, clause 5.3.5.3]

The UE shall perform the following actions upon reception of the *RRCReconfiguration,* or upon execution of the conditional reconfiguration (CHO or CPC):

…

1> set the content of the *RRCReconfigurationComplete* message as follows:

…

2> if the UE has connection establishment failure or connection resume failure information available in *VarConnEstFailReport* and if the RPLMN is equal to *plmn-Identity* stored in *VarConnEstFailReport*:

3> include *connEstFailInfoAvailable* in the *RRCReconfigurationComplete* message;

2> if the UE has radio link failure or handover failure information available in *VarRLF-Report* and if the RPLMN is included in *plmn-IdentityList* stored in *VarRLF-Report*; or

2> if the UE has radio link failure or handover failure information available in *VarRLF-Report* of TS 36.331 [10] and if the UE is capable of cross-RAT RLF reporting and if the RPLMN is included in *plmn-IdentityList* stored in *VarRLF-Report* of TS 36.331 [10]:

3> include *rlf-InfoAvailable* in the *RRCReconfigurationComplete* message;

…

[TS 38.331, clause 5.7.10.3]

Upon receiving the *UEInformationRequest* message, the UE shall, only after successful security activation:

…

1> if the *logMeasReportReq* is present and if the RPLMN is included in *plmn-IdentityList* stored in *VarLogMeasReport*:

2> if *VarLogMeasReport* includes one or more logged measurement entries, set the contents of the *logMeasReport* in the *UEInformationResponse* message as follows:

3> include the *absoluteTimeStamp* and set it to the value of *absoluteTimeInfo* in the *VarLogMeasReport*;

3> include the *traceReference* and set it to the value of *traceReference* in the *VarLogMeasReport*;

3> include the *traceRecordingSessionRef* and set it to the value of *traceRecordingSessionRef* in the *VarLogMeasReport;*

3> include the *tce-Id* and set it to the value of *tce-Id* in the *VarLogMeasReport*;

3> include the *logMeasInfoList* and set it to include one or more entries from *VarLogMeasReport* starting from the entries logged first;

3> if the *VarLogMeasReport* includes one or more additional logged measurement entries that are not included in the *logMeasInfoList* within the *UEInformationResponse* message:

4> include the *logMeasAvailable*;

…

1> if *rlf-ReportReq* is set to *true*:

2> if the UE has radio link failure information or handover failure information available in *VarRLF-Report* and if the RPLMN is included in *plmn-IdentityList* stored in *VarRLF-Report*:

3> set *timeSinceFailure* in *VarRLF-Report* to the time that elapsed since the last radio link or handover failure in NR;

3> set the *rlf-Report* in the *UEInformationResponse* message to the value of *rlf-Report* in *VarRLF-Report*;

3> discard the *rlf-Report* from *VarRLF-Report* upon successful delivery of the *UEInformationResponse* message confirmed by lower layers;

…

1> if the *logMeasReport* is included in the *UEInformationResponse*:

2> submit the *UEInformationResponse* message to lower layers for transmission via SRB2;

2> discard the logged measurement entries included in the *logMeasInfoList* from *VarLogMeasReport* upon successful delivery of the *UEInformationResponse* message confirmed by lower layers;

1> else:

2> submit the *UEInformationResponse* message to lower layers for transmission via SRB1.

8.1.6.2.3.3 Test description

8.1.6.2.3.3.1 Pre-test conditions

System Simulator:

- NR Cell 1 is the serving cell and E-UTRA Cell 1 is the inter-RAT neighbour cell of NR Cell 1

- System information combination NR-6 as defined in TS 38.508-1 [4] clause 4.4.3.1.2.

- System information combination 31 as defined in TS 36.508 [7] clause 4.4.3.1 is used in the E-UTRA cell.

Preamble:

- The UE is in state 3N-A as defined in TS 38.508-1 [4], subclause 4.4A on NR Cell 1.

8.1.6.2.3.3.2 Test procedure sequence

Table 8.1.6.2.3.3.2-1 and Table 8.1.6.2.3.3.2-2 illustrate the downlink power levels and other changing parameters to be applied for the cells at various time instants of the test execution. Configurations marked "T1", "T2" and "T3" are applied at the points indicated in the Main behaviour description in Table 8.1.6.2.3.3.2-1 and Table 8.1.6.2.3.3.2-2. The exact instants on which these values shall be applied are described in the texts in this clause.

Table 8.1.6.2.3.3.2-1: Time instances of cell power level and parameter changes for FR1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Parameter** | **Unit** | **NR Cell 1** | **E-UTRA Cell 1** | **Remark** |
| **T0** | SS/PBCH  SSS EPRE | dBm/SCS | -90 | - | Power levels are such that entry condition 1 for event B2 and entry condition 2 are both satisfied:  Mp + Hys < Thresh1 and  Mn + Ofn + Ocn - Hys > Thresh2 |
| Cell-specific RS EPRE | dBm/15kHz | - | -73 |
| **T1** | SS/PBCH  SSS EPRE | dBm/SCS | Off | - | Only E-UTRA Cell 1 is available. |
| Cell-specific RS EPRE | dBm/15kHz | - | -73 |
| **T2** | SS/PBCH  SSS EPRE | dBm/SCS | -88 | - |  |
| Cell-specific RS EPRE | dBm/15kHz | - | -85 |

Table 8.1.6.2.3.3.2-2: Time instances of cell power level and parameter changes for FR2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Parameter** | **Unit** | **NR Cell 1** | **E-UTRA Cell 1** | **Remark** |
| **T0** | SS/PBCH  SSS EPRE | dBm/SCS | -92 | - | Power levels are such that entry condition 1 for event B2 and entry condition 2 are both satisfied:  Mp + Hys < Thresh1 and  Mn + Ofn + Ocn - Hys > Thresh2 |
| Cell-specific RS EPRE | dBm/15kHz | - | -73 |
| **T1** | SS/PBCH  SSS EPRE | dBm/SCS | Off | - | Only E-UTRA Cell 1 is available. |
| Cell-specific RS EPRE | dBm/15kHz | - | -73 |
| **T2** | SS/PBCH  SSS EPRE | dBm/SCS | -82 | - |  |
| Cell-specific RS EPRE | dBm/15kHz | - | -85 |

Table 8.1.6.2.3.3.2-3: Main behaviour

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| St | Procedure | Message Sequence | | TP | Verdict |
|  |  | U - S | Message |  |  |
| 1 | The SS transmits an *RRCReconfiguration* message including *measConfig* to setup inter-RAT measurement on NR Cell1. | <-- | NR RRC: *RRCReconfiguration* | - | - |
| 2 | The UE transmits an *RRCReconfigurationComplete* message on NR Cell1. | --> | NR RRC: *RRCReconfigurationComplete* | - | - |
| 3 | The UE transmits a *MeasurementReport* message on NR Cell 1. | --> | *MeasurementReport* | - | - |
| 4 | The SS changes NR Cell1 and E-UTRA Cell 1 parameters according to the row "T1" in table 8.1.6.2.3.3.2-1/2. | - | - | - | - |
| 5 | Generic test procedure in TS 38.508-1 Table 4.9.7.2.2-1 is performed with the conditions ‘connected without release’ & ‘mapped 5G security context’ on E-UTRA Cell 1. | - | - | - | - |
| 5A-5C | Generic Test Procedure as defined in steps 5-7 of TS 36.508-1 [4] Table 4.5A.6.3-1 is performed to establish radio bearer corresponding to the default PDN. | - | - | - | - |
| 6 | The SS changes NR Cell 1 parameter according to the row "T2" in Table 8.1.6.2.3.3.2-1/2. | - | - | - | - |
| 7 | The SS transmits a *MobilityFromEUTRACommand* messageon E-UTRA Cell 1. | <-- | E-UTRA RRC: *MobilityFromEUTRACommand* | - | - |
| 8 | Check: Does the UE transmit a *RRCReconfigurationComplete* messagecontaining *rlf-InfoAvailable* on NR Cell 1? | --> | NR RRC: *RRCReconfigurationComplete* | 1 | P |
| 9 | The UE transmits a *ULInformationTransfer* message and a REGISTRATION REQUEST message indicating “mobility registration updating” is sent to update the registration of the actual tracking area. | --> | NR RRC: *ULInformationTransfer*  5GMM: REGISTRATION REQUEST | - | - |
| 10 | SS sends an *DLInformationTransfer* message and a REGISTRATION ACCEPTmessage containing a 5G-GUTI. | <-- | NR RRC: *DLInformationTransfer*  5GMM: REGISTRATION ACCEPT | - | - |
| 11 | The UE transmits an *ULInformationTransfer* message and a REGISTRATION COMPLETE message. | --> | NR RRC: *ULInformationTransfer*  5GMM: REGISTRATION COMPLETE | - | - |
| 12-12B | Steps 5-6 of the procedure in table 4.5.4.2-3 in TS 38.508-1 [4] are performed. | - | - | - | - |
| 12C | The SS transmits an RRCReconfiguration message to establish SRB2 and DRB(s).  The RRCReconfiguration message is configured using RRCReconfiguration-SRB2-DRB(n, m) where n and m are the number of DRB(s) configured with RLC-AM and RLC-UM respectively. | <-- | NR RRC: RRCReconfiguration | - | - |
| 12D | The UE transmits an *RRCReconfigurationComplete* message. | --> | NR RRC: *RRCReconfigurationComplete* | - | - |
| 13 | The SS transmits a *UEInformationRequest* message. | <-- | NR RRC: *UEInformationRequest* | - | - |
| 14 | Check: Does the UE transmit a *UEInformationResponse* message on NR Cell 1? | --> | NR RRC: *UEInformationResponse* | 2 | P |

8.1.6.2.3.3.3 Specific message contents

Table 8.1.6.2.3.3.3-1: *RRCReconfiguration* (step 1, Table 8.1.6.2.3.3.2-3)

|  |
| --- |
| Derivation Path: TS 38.508-1 [4] Table 4.6.1-13 with condition NR\_MEAS |

Table 8.1.6.2.3.3.3-2: *MeasConfig* (Table 8.1.6.2.3.3.3-1)

|  |  |  |  |
| --- | --- | --- | --- |
| Derivation Path: TS 38.508-1 [4] Table 4.6.3-69 | | | |
| Information Element | Value/remark | Comment | Condition |
| MeasConfig ::= SEQUENCE { |  |  |  |
| measObjectToAddModList SEQUENCE (SIZE (1..maxNrofMeasId)) OF MeasObjectToAddMod { | 2 entries |  |  |
| MeasObjectToAddMod[1] SEQUENCE { |  | entry 1 |  |
| measObjectId | 1 | MeasObjectIdNR-f1 |  |
| measObject CHOICE { |  |  |  |
| measObjectNR SEQUENCE { |  |  |  |
| ssbFrequency | ssbFrequency IE equals the ARFCN for NR Cell 1 |  |  |
| absThreshSS-BlocksConsolidation | Not present |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| MeasObjectToAddMod[2] SEQUENCE { |  | entry 2 |  |
| measObjectId | 2 | MeasObjectIdE-UTRA-f1 |  |
| measObject CHOICE { |  |  |  |
| measObjectEUTRA SEQUENCE { |  |  |  |
| carrierFreq | ARFCN-ValueEUTRA for E-UTRA Cell 1 |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| reportConfigToAddModList SEQUENCE(SIZE (1..maxReportConfigId)) OF ReportConfigToAddMod { | 1 entry |  |  |
| ReportConfigToAddMod[1] SEQUENCE { |  | entry 1 |  |
| reportConfigId | 1 |  |  |
| reportConfig CHOICE { |  |  |  |
| reportConfigInterRAT | ReportConfigInterRAT-EventB2 |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| measIdToAddModList SEQUENCE (SIZE (1..maxNrofMeasId)) OF MeasIdToAddMod { | 1 entry |  |  |
| MeasIdToAddMod[1] SEQUENCE { |  | entry 1 |  |
| measId | 1 |  |  |
| measObjectId | 2 |  |  |
| reportConfigId | 1 |  |  |
| } |  |  |  |
| } |  |  |  |
| quantityConfig | QuantityConfig with Condition INTER-RAT |  |  |
| measGapConfig | MeasGapConfig |  |  |
| } |  |  |  |

Table 8.1.6.2.3.3.3-3: *ReportConfigInterRAT-EventB2* (Table 8.1.6.2.3.3.3-2)

|  |  |  |  |
| --- | --- | --- | --- |
| Derivation Path: TS 38.508-1 [4] Table 4.6.3-141 with condition EVENT\_B2 | | | |
| Information Element | Value/remark | Comment | Condition |
| ReportConfigNR ::= SEQUENCE { |  |  |  |
| reportType CHOICE { |  |  |  |
| eventTriggered SEQUENCE { |  |  |  |
| eventId CHOICE { |  |  |  |
| eventB2 SEQUENCE { |  |  |  |
| b2-Threshold1 SEQUENCE { |  |  |  |
| rsrp | 73 | -83dBm | FR1 |
|  | 73 | -83dBm | FR2 |
| } |  |  |  |
| b2-Threshold2EUTRA SEQUENCE { |  |  |  |
| rsrp | 58 | -83dBm | FR1 |
|  | 58 | -83dBm | FR2 |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| reportAmount | r1 |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |

Table 8.1.6.2.3.3.3-4: *MeasurementReport* (step 4, Table 8.1.6.2.3.3.2-3)

|  |  |  |  |
| --- | --- | --- | --- |
| Derivation Path: TS 38.508-1 [4] Table 4.6.1-5A | | | |
| Information Element | Value/remark | Comment | Condition |
| MeasurementReport ::= SEQUENCE { |  |  |  |
| criticalExtensions CHOICE { |  |  |  |
| measurementReport SEQUENCE { |  |  |  |
| measResults SEQUENCE { |  |  |  |
| measId | 1 |  |  |
| measResultServingMOList SEQUENCE (SIZE (1..maxNrofServingCells)) OF MeasResultServMO { | 1 entry | Report NR Cell 1 |  |
| MeasResultServMO[1] SEQUENCE { |  | entry 1 |  |
| servCellId | ServCellIndex of NR Cell 1 |  |  |
| measResultServingCell SEQUENCE { |  |  |  |
| physCellId | Physical layer cell identity of NR Cell 1 |  |  |
| measResult SEQUENCE { |  |  |  |
| cellResults SEQUENCE { |  |  |  |
| resultsSSB-Cell SEQUENCE { |  |  |  |
| rsrp | (0..127) |  |  |
| rsrq | (0..127) |  |  |
| sinr | Not present |  |  |
|  | Not checked |  | pc\_ss\_SINR\_Meas |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| measResultNeighCells CHOICE { |  |  |  |
| measResultListEUTRA SEQUENCE (SIZE (1.. maxCellReport)) OF MeasResultEUTRA { | 1 entry | Report E-UTRA neighbour cell |  |
| MeasResultEUTRA[1] SEQUENCE { |  | entry 1 |  |
| eutra-PhysCellId | Physical layer cell identity of E-UTRA Cell 1 |  |  |
| measResult SEQUENCE { |  |  |  |
| rsrp | (0..97) |  |  |
| rsrq | (0..34) |  |  |
| sinr | Not present |  |  |
| } |  |  |  |
| cgi-Info | Not present |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |

Table 8.1.6.2.3.3.3-5: *MobilityFromEUTRACommand* (step 8, Table 8.1.6.2.3.3.2-3)

|  |  |  |  |
| --- | --- | --- | --- |
| Derivation Path: TS 36.508 [7] table 4.6.1-6 | | | |
| Information Element | Value/remark | Comment | Condition |
| MobilityFromEUTRACommand ::= SEQUENCE { |  |  |  |
| criticalExtensions CHOICE { |  |  |  |
| c1 CHOICE { |  |  |  |
| mobilityFromEUTRACommand-r8 SEQUENCE { |  |  |  |
| purpose CHOICE { |  |  |  |
| handover SEQUENCE { |  |  |  |
| targetRAT-Type | nr |  |  |
| targetRAT-MessageContainer | RRCReconfiguration |  |  |
| nas-SecurityParamFromEUTRA | Not present |  |  |
| systemInformation | Not present |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |

Table 8.1.6.2.3.3.3-6: *RRCReconfiguration* (Table 8.1.6.2.3.3.3-5)

|  |  |  |  |
| --- | --- | --- | --- |
| Derivation Path: TS 38.508-1 [4] Table 4.6.1-13 | | | |
| Information Element | | Value/remark | Comment | Condition |
| RRCReconfiguration ::= SEQUENCE { | |  |  |  |
| criticalExtensions CHOICE { | |  |  |  |
| rrcReconfiguration SEQUENCE { | |  |  |  |
| radioBearerConfig | | RadioBearerConfig as per table 4.6.3-132 in TS 38.508-1 [4] with conditions SRB1,SRB2 and DRB1 |  |  |
| nonCriticalExtension SEQUENCE { | |  |  |  |
| masterCellGroup | | CellGroupConfig with conditions SRB1,SRB2 and DRB1 | OCTET STRING (CONTAINING CellGroupConfig) |  |
| fullConfig | | true |  |  |
| masterKeyUpdate | | MasterKeyUpdate |  |  |
| } | |  |  |  |
| } | |  |  |  |
| } | |  |  |  |
| } | |  |  |  |

Table 8.1.6.2.3.3.3-7: *RRCReconfigurationComplete* (step 9, Table 8.1.6.2.3.3.2-3)

|  |  |  |  |
| --- | --- | --- | --- |
| Derivation Path: TS 38.508-1 [4], Table 4.6.1-14 | | | |
| Information Element | | Value/remark | Comment | Condition |
| RRCReconfigurationComplete ::= SEQUENCE { | |  |  |  |
| criticalExtensions CHOICE { | |  |  |  |
| rrcReconfigurationComplete SEQUENCE { | |  |  |  |
| nonCriticalExtension SEQUENCE { | |  |  |  |
| nonCriticalExtension SEQUENCE { | |  |  |  |
| nonCriticalExtension SEQUENCE { | |  |  |  |
| ue-MeasurementsAvailable-r16 SEQUENCE { | |  |  |  |
| rlf-InfoAvailable-r16 | | true |  |  |
| } | |  |  |  |
| } | |  |  |  |
| } | |  |  |  |
| } | |  |  |  |
| } | |  |  |  |
| } | |  |  |  |
| } | |  |  |  |

Table 8.1.6.2.3.3.3-8: *UEInformationRequest* (step 10, Table 8.1.6.2.3.3.2-3)

|  |  |  |  |
| --- | --- | --- | --- |
| Derivation Path: TS 38.508-1 [4], Table 4.6.1-32A | | | |
| Information Element | Value/remark | Comment | Condition |
| UEInformationRequest-r16 ::= SEQUENCE { |  |  |  |
| criticalExtensions CHOICE { |  |  |  |
| ueInformationRequest-r16 SEQUENCE { |  |  |  |
| rlf-ReportReq-r16 | true |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |

Table 8.1.6.2.3.3.3-9: *UEInformationResponse* (step 11, Table 8.1.6.2.3.3.2-3)

|  |  |  |  |
| --- | --- | --- | --- |
| Derivation Path: TS 38.508-1 [4], Table 4.6.1-32B | | | |
| Information Element | Value/remark | Comment | Condition |
| UEInformationResponse-r16 ::= SEQUENCE { |  |  |  |
| criticalExtensions CHOICE { |  |  |  |
| ueInformationResponse-r16 SEQUENCE { |  |  |  |
| rlf-Report-r16 CHOICE { |  |  |  |
| nr-RLF-Report-r16 SEQUENCE { |  |  |  |
| measResultLastServCell-r16 SEQUENCE { |  |  |  |
| measResult-r16 SEQUENCE { |  |  |  |
| cellResults-r16 SEQUENCE { |  |  |  |
| resultsSSB-Cell-r16 SEQUENCE { |  |  |  |
| rsrp | (0..127) |  |  |
| rsrq | (0..127) |  |  |
| sinr | Not checked |  |  |
| } |  |  |  |
| resultsCSI-RS-Cell-r16 | Not checked |  |  |
| } |  |  |  |
| rsIndexResults-r16 SEQUENCE { |  |  |  |
| resultsSSB-Indexes-r16 SEQUENCE { |  |  |  |
| ssb-Index | 1 |  |  |
| ssb-Results SEQUENCE { |  |  |  |
| rsrp | (0..127) |  |  |
| rsrq | (0..127) |  |  |
| sinr | Not checked |  |  |
| } |  |  |  |
| } |  |  |  |
| ssbRLMConfigBitmap-r16 | Not present |  |  |
| resultsCSI-RS-Indexes-r16 | Not present |  |  |
| csi-rsRLMConfigBitmap-r16 | Not present |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| measResultNeighCells-r16 SEQUENCE { |  |  |  |
| measResultListEUTRA-r16 SEQUENCE(SIZE (1..maxFreq)) OF SEQUENCE { | 1 entry |  |  |
| carrierFreq-r16[1] | Same as E-UTRA Cell 1 |  |  |
| measResultList-r16[1] SEQUENCE (SIZE (1..maxCellReport)) OF SEQUENCE { | 1 entry |  |  |
| eutra-PhysCellId[1] | Same as E-UTRA Cell 1 |  |  |
| measResult[1] | MeasQuantityResults of E-UTRA Cell 1 |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| c-RNTI-r16 | the value of the C-RNTI of the UE |  |  |
| previousPCellId-r16 | Not present |  |  |
| failedPCellId-r16 CHOICE { |  |  |  |
| nrFailedPCellId-r16 CHOICE { |  |  |  |
| pci-arfcn-r16 | Same as NR Cell 1 |  |  |
| } |  |  |  |
| } |  |  |  |
| reconnectCellId-r16 | Not present |  |  |
| timeUntilReconnection-16 | Not present |  |  |
| reestablishmentCellId-r16 | Not present |  |  |
| timeConnFailure-r16 | Any allowed value |  |  |
| timeSinceFailure-r16 | Any allowed value |  |  |
| connectionFailureType-r16 | rlf |  |  |
| rlf-Cause-r16 | t310-Expiry |  |  |
| locationInfo-r16 | Not checked |  |  |
| noSuitableCellFound-r16 | Not present |  |  |
| ra-InformationCommon-r16 | Not present |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |
| } |  |  |  |

Table 8.1.6.2.3.3.3-10: *RRCReconfiguration* (step 12C, Table 8.1.6.2.3.3.2-3)

|  |
| --- |
| Derivation Path: TS 38.508-1, table 4.8.1-1B |