SONMDT Comments file

Template:

# Xnnn

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| Xnnn |  |  |  |  |  |  | vnnn | ToDo |

**[Description]**:

**[Proposed Change]**:

**[Comments]**:

Instructions:

1. Copy the template RIL comments fields above (including the Heading Xnnn)
2. Paste the RIL comments fields at its position while **respecting the order of the RILs in the Review file (i.e. keep the order of the spec).**
3. Fill in the fields, see R19 ASN.1 Guideline.
4. Companies may comment whether they agree or disagree.
5. Can copy spec text and use Word “Track changes”, etc.
6. Do not delete text added by other companies.

# C051

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| C051 | SONMDT | 1 | MCG LTM |  | Tangxun |  | V002 | ToDo |

**[Description]**: in R19 SONMDT, RAN2 only focuses on MCG LTM, and we notice that in the corresponding changes sometimes “MCG LTM” is used and sometimes “LTM” is used. We suggest to keep all relevant changes aligned, i.e., to use “MCG LTM” consistently.

**[Proposed Change]**: add “MCG” in front of “LTM”.

**[Comments]**:

# C052

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| C052 | SONMDT | 1 | Duplicate *successHO-InfoAvailable* indication |  | Tangxun |  | V002 | ToDo |

**[Description]**: according to current wording, it means UE will report *successHO-InfoAvailable* every time when it receives a RRCReconfiguration message via SRB1. In our understanding, this is not the original intention, since this resolution is only for rach-less scenario when the UE can’t report this indication in Msg3.

**[Proposed Change]**: add further restriction, e.g., if UE hasn’t reported *successHO-InfoAvailable* since successful handover information becomes available in *VarSuccessHO-Report,* to make sure successHO-InfoAvailable is reported only once.

**[Comments]**:

# C053

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| C053 | SONMDT | 1 | PSCell may not be available when RLF happens |  | Tangxun |  | V002 | ToDo |

**[Description]**: In case a RLF happens, even if the UE was configured with *condExecutionCond* and *condExecutionCondPSCell,* there may be no PSCell at UE side.

**[Proposed Change]**: add “if available” as below:

PSCell (if available, in case of no PSCell change)

**[Comments]**:

# C054

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| C054 | SONMDT | 1 | Duplicate condition |  | Tangxun |  | V002 | ToDo |

**[Description]**: the condition “if the UE was configured with *condExecutionCond* and *condExecutionCondPSCell*” in bullet 3 is duplicate, as it already appears in the bullet 2.

**[Proposed Change]**: remove the duplicate condition as below:

3> set the *rsIndexResults* in *measResultLastServPSCell* to include all the available measurement quantities of the source PSCell (in case of PSCell change) or PSCell (in case of no PSCell change) , ordered such that the highest SS/PBCH block RSRP is listed first if SS/PBCH block RSRP measurement results are available, otherwise the highest SS/PBCH block RSRQ is listed first if SS/PBCH block RSRQ measurement results are available, otherwise the 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;

**[Comments]**:

# C055

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| C055 | SONMDT | 1 | Time based CHO is not relevant |  | Tangxun |  | V002 | ToDo |

**[Description]**: *distanceFromReference2* is only related to location based CHO, so it only needs UE to support RLF-Report for conditional handover with location-based trigger condition.

**[Proposed Change]**: remove “time-based or” as below:

4> if the UE supports RLF-Report for conditional handover with location-based trigger condition and if one entry of *choConfig* concerns *condEventD2*;

**[Comments]**:

# C056

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| C056 | SONMDT | 1 | UE capability check is missing |  | Tangxun |  | V002 | ToDo |

**[Description]**: before setting the values in RLF report for conditional handover with candidate SCG, UE capability check should be done.

**[Proposed Change]**: add “if the UE supports RLF-Report for conditional handover with candidate SCG” as below:

1> if the UE supports RLF-Report for conditional handover with candidate SCG, for each entry of *condReconfigList* in the MCG *VarConditionalReconfig* including both *condExecutionCond* and *condExecutionCondPSCell*, include an entry in *cho-WithCandidateSCGInfoList* and set the values as follows:

**[Comments]**:

# C057

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| C057 | SONMDT | 1 | *reselectedCellId* doesn’t exist in any cell selection state |  | Tangxun |  | V002 | ToDo |

**[Description]**: according to RAN2 agreement, in case of transition to any cell selection state, there is no reselected cell to log

1. RAN2 includes the following information along with NSAG information in the logged MDT report: Cell information of the cell that the UE was in when it was not able to find its highest prio NSAG (if available, it may not be available if the UE goes to any cell selection state).

**[Proposed Change]**: remove this bullet 5 as below:

3> if the UE is in any cell selection state (as specified in TS 38.304 [20]):

4> set *anyCellSelectionDetected* to indicate the detection of no suitable or no acceptable cell found;

4> if the UE was configured with slice-based cell reselection and was not able to select a suitable cell that supports the NSAG ID with the highest priority (as specified in TS 38.304 [20]) during the last logging interval:

5> set the *nsag-ID* to the NSAG ID with the highest priority ;

**[Comments]**:

# C058

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| C058 | SONMDT | 1 | SCG RLF |  | Tangxun |  | V002 | ToDo |

**[Description]**: “SCG RLF” should be used here instead of “SCG failure”, as SCG failure has a wider coverage, e.g., “failure of SCG reconfiguration with sync, SCG configuration failure for RRC message on SRB3, SCG integrity check failure”

**[Proposed Change]**: replace “SCG failure” by “SCG RLF”

**[Comments]**:

# C059

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| C059 | SONMDT | 1 | CPC execution |  | Tangxun |  | V002 | ToDo |

**[Description]**: in bullet 3, the “failure” only refers to CPC execution failure, but not other failures.

**[Proposed Change]**: add “execution” as below:

3> if the failure occurred during a subsequent CPC execution:

**[Comments]**:

# C060

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| C060 | SONMDT | 1 | Not a R19 change |  | Tangxun |  | V002 | ToDo |

**[Description]**: an “applied” is added here, but our understanding is that this change is not related a R19 feature. If this change is deemed needed, we should use a correction CR to make this change from R17.

**[Proposed Change]**: remove “applied” as below:

5> set the *timeSinceCHO-Reconfig* to the time elapsed between the initiation of the execution of conditional reconfiguration for the target PCell and the reception of the last *conditionalReconfiguration* including the *condRRCReconfig* of the target PCell in the source PCell;

**[Comments]**:

# C061

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| C061 | SONMDT | 1 | Wrong field description |  | Tangxun |  | V002 | ToDo |

**[Description]**: the field description of “sdt-UL-DataVolume” seems to be a copy of sdt-FailureCause.

**[Proposed Change]**: update the field description of “sdt-UL-DataVolume” as below:

***sdt-UL-DataVolume***

This field logs the buffered data volume in the UE for the radio bearer configured for the SDT during evaluation of SDT procedure. This field is included when the RA report entry is included because of SDT initiation failure. Otherwise, the field is absent. Value in bytes, the maximum value 96000 means 96000 bytes or larger.

**[Comments]**:

# C062

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| C062 | SONMDT | 1 | Misalignment with procedural text |  | Tangxun |  | V002 | ToDo |

**[Description]**: according to procedural text, the field “***pSCellId***” can be set to “source PSCell (in case of PSCell change) or PSCell (in case of no PSCell change)”. And it’s not only applicable to CHO with candidate SCG procedure failure scenario.

**[Proposed Change]**: update the field description of “***pSCellId***” to align with procedural text as below:

This field is used to indicate the PSCell in which the UE failed to perform fast MCG recovery procedure or the UE successfully performed fast MCG recovery procedure, or the source PSCell (in case of PSCell change) or PSCell (in case of no PSCell change) if the UE was configured with condExecutionCond and condExecutionCondPSCell.

**[Comments]**:

# C063

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| C063 | SONMDT | 1 | Co-existence of LTM and DAPS is not supported |  | Tangxun |  | V002 | ToDo |

**[Description]**: according to the following RAN2 agreement made in R18 Mobility WI, we don’t need to consider the co-existence scenario of LTM and DAPS

**The coexistence of LTM and DAPS HO is not supported in Rel-18.**

**[Proposed Change]**: update the field description of “***timeSinceFailure***” as below:

***timeSinceFailure***

This field is used to indicate the time that elapsed since the connection (radio link, handover or LTM cell switch) failure. Value in seconds. The maximum value 172800 means 172800s or longer. In the case of failure(s) (either at source or at target or at both) associated to DAPS handover, this field indicates the time elapsed since the latest connection (radio link or handover) failure.

**[Comments]**:

# X550

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| X550 | SONMDT | 1 | Incomplete procedure text |  | Xiaomi (Shuai) |  | V001 | ToDo |

**[Description]**: Procedure in clause 5.3.10.5 only consider the case for earth-moving cell, the case that NTN cell is (quasi-)Earth fixed cell is missed.

**[Proposed Change]**: To complete the below procedure texts when considering the reference location of (quasi-)Earth fixed cell is fixed.

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

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

1> if the UE is not in SNPN access mode, set the *plmn-IdentityList* to include the list of EPLMNs stored by the UE (i.e. including the RPLMN);

1> else if the UE is in SNPN access mode, set the *snpn-IdentityList* to include the list of equivalent SNPNs stored by the UE (i.e., including the registered SNPN identity);

1> set the *measResultLastServCell* to include the cell level RSRP, RSRQ and the available SINR, of the source PCell (in case HO failure) or PCell (in case RLF) based on the available SSB and CSI-RS measurements collected up to the moment the UE detected failure;

1> if the UE supports RLF-Report for conditional handover with candidate SCG and if the UE was configured with *condExecutionCond* and *condExecutionCondPSCell*;

2> set the *measResultLastServPSCell* to include the cell level RSRP, RSRQ and the available SINR, of the source PSCell (in case of PSCell change) or PSCell (in case of no PSCell change) based on the available SSB and CSI-RS measurements collected up to the moment the UE detected the failure;

2> if the UE does not support RLF-Report for fast MCG recovery procedure as specified in TS 38.306 [26] or if T316 is not configured:

3> set *pSCellId* to the the global cell identity and tracking area code, if available, and otherwise the physical cell identity and carrier frequency of the source PSCell (in case of PSCell change) or PSCell (in case of no PSCell change);

1> if the UE supports RLF-Report for conditional handover with time-based or location-based trigger condition:

2> if one entry of choConfig concerns condEventD1:

3> set distanceFromReference1 to the measured distance between the UE and the serving cell fixed reference location;

2> else if one entry of *choConfig* concerns *condEventD2*:

3> set *distanceFromReference1* to the measured distance between the UE and the serving cell moving reference location;

Omitted….

2> for each neighbour cell, if any, included in *measResultListNR* in *measResultNeighCells*:

3> if the UE supports RLF-Report for conditional handover and if the neighbour cell is one of the candidate cells for which the *reconfigurationWithSync* is included in the *masterCellGroup* in the MCG *VarConditionalReconfig* at the moment of the detected failure and if the related MCG *VarConditionalReconfig* only concerns measurement-based trigger condition; or

3> if the UE supports RLF-Report for conditional handover with time-based and location-based trigger conditions in NTN and if the neighbour cell is one of the candidate cells for which the *reconfigurationWithSync* is included in the *masterCellGroup* in the MCG *VarConditionalReconfig* at the moment of the detected failure; or

3> if the UE supports RLF-Report for conditional handover with candidate SCG and if the neighbour cell is one of the candidate cells for which the *reconfigurationWithSync* is included in the *masterCellGroup* in the MCG *VarConditionalReconfig* at the moment of the detected failure:

4> set *choConfig* in *MeasResult2NR* to the execution condition for each *measId* within *condTriggerConfig* associated to the neighbour cell within the MCG *VarConditionalReconfig*;

4> if the first entry of *choConfig* corresponds to a fulfilled execution condition at the moment of handover failure, or radio link failure; or

4> if the second entry of *choConfig*, if available, corresponds to a fulfilled execution condition at the moment of handover failure, or radio link failure:

5> set *firstTriggeredEvent* to the execution condition *condFirstEvent* corresponding to the first entry of *choConfig* or to the execution condition *condSecondEvent* corresponding to the second entry of *choConfig*, whichever execution condition was fulfilled first in time;

5> set *timeBetweenEvents* to the elapsed time between the point in time of fulfilling the condition in *choConfig* that was fulfilled first in time, and the point in time of fulfilling the condition in *choConfig* that was fulfilled second in time, if both the first execution condition corresponding to the first entry and the second execution condition corresponding to the second entry in the *choConfig* were fulfilled;

4> if the UE supports RLF-Report for conditional handover with time-based or location-based trigger condition:

5> if one entry of choConfig concerns condEventD1:

6> set distanceFromReference2 to the measured distance between the UE and the fixed reference location of the neighbour cell, at the moment of handover failure, or radio link failure;

5> else if one entry of *choConfig* concerns *condEventD2*:

6> set *distanceFromReference2* to the measured distance between the UE and the moving reference location of the neighbour cell, at the moment of handover failure, or radio link failure;

**[Comments]**:

# X551

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| X551 | SONMDT | 1 | Incomplete procedure text |  | Xiaomi (Shuai) |  | V001 | ToDo |

**[Description]**: In clause 5.5a.3.2, the procedure is not clear due to there are two scearios will leading to measurement logging suspending, which needs to be clarified to make the procedure clear.

**[Proposed Change]**: As below changes, the first “if..else” judgment sentence is restricted to IDC scenario, so that when UE cannot get the location information, UE will go to second “if..else” judgment sentence.

While T330 is running and SDT procedure is not ongoing, the UE shall:

1> if measurement logging is suspended due to IDC problems:

2> if during the last logging interval the IDC problems detected by the UE is resolved, resume measurement logging;

1> if *AreaConfigurationNTN-List* is included in *VarLogMeasConfig*:

2> if location information is available, and is outside of all areas indicated by *AreaConfigurationNTN-List*; or

2> if location information is not available:

3> skip the execution of the remainder of clause 5.5a.3.2 for the current logging interval (i.e. do not perform measurement logging for this interval);

**[Comments]**:

# X552

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| X552 | SONMDT | 1 | Incomplete procedure text and field description |  | Xiaomi (Shuai) |  | V001 | ToDo |

**[Description]**: In clause 5.5a.3.2, NSAG ID is used but not even defined or referred, thus need to add the reference for it.

**[Proposed Change]**: As below changes, add the NAS reference for NSAG ID in procedure text and field description part.

3> if the UE is in any cell selection state (as specified in TS 38.304 [20]):

4> set *anyCellSelectionDetected* to indicate the detection of no suitable or no acceptable cell found;

4> if the UE was configured with slice-based cell reselection and was not able to select a suitable cell that supports the NSAG ID with the highest priority (as specified in TS 38.304 [20]) during the last logging interval:

5> set the *nsag-ID* to the NSAG ID with the highest priority provided by upper layer (see TS 24.501 [23]);

5> set the *reselectedCellId* to the cell UE reselected after failure in attempt to select a suitable cell that support the NSAG ID with the highest priority before transition to any cell selection state;

4> if the *reportType* is set to *eventTriggered* in the *VarLogMeasConfig*; and

4> if the RPLMN at the time of entering the any cell selection state is included in *plmn-IdentityList* stored in *VarLogMeasReport* or if the registered SNPN identity at the time of entering the any cell selection state is included in *snpn-ConfigID-List* stored in *VarLogMeasReport*; and

4> if *areaConfiguration* is not included in *VarLogMeasConfig* or if the last suitable cell that the UE was camping on is part of the area indicated by *areaConfig* of *areaConfiguration* in *VarLogMeasConfig*, or if last suitable cell that the UE was camping on is part of the area indicated by *cag-ConfigList* of *areaConfiguration* in *VarLogMeasConfig,* or if last suitable cell that the UE was camping on is part of the area indicated by *snpn-ConfigList* of *areaConfiguration* in *VarLogMeasConfig*:

5> set the *servCellIdentity* to indicate global cell identity of the last suitable cell that the UE was camping on;

5> set the *measResultServingCell* to include the quantities of the last suitable cell the UE was camping on;

4> else if the *reportType* is set to *periodical* in the *VarLogMeasConfig*:

5> set the *servCellIdentity* to indicate global cell identity of the last logged cell that the UE was camping on;

5> set the *measResultServingCell* to include the quantities of the last logged cell the UE was camping on;

3> else:

4> set the *servCellIdentity* to indicate global cell identity of the cell the UE is camping on;

4> set the *measResultServingCell* to include the quantities of the cell the UE is camping on;

4> if the UE was configured with slice-based cell reselection and was not able to select a suitable cell that supports the NSAG ID with the highest priority (as specified in TS 38.304 [20]) during the last logging interval:

5> set the *nsag-ID* to the NSAG ID with the highest priority provided by upper layer (see TS 24.501 [23]);

5> set the *reselectedCellId* to the cell UE reselected after failure in attempt to select a suitable cell that support the NSAG ID with the highest priority, if it is different from *servCellIdentity*;

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| *LogMeasReport* field descriptions |
| ***nsag-ID***  Indicates the NSAG ID with the highest priority provided by upper layer (see TS 24.501 [23]), for the UE that was configured with slice-based cell reselection and was not able to perform a cell reselection to a cell asscoiated with the NSAG with highest priority (as specified in TS 38.304 [20]). |
| ***relativeTimeStamp***  Indicates the time of logging measurement results, measured relative to the *absoluteTimeStamp*. Value in seconds. |
| ***reselectedCellId***  Indicates the cell that does not support the NSAG ID with highest priority provided by upper layer (see TS 24.501 [23]), for the UE that was configured with slice-based cell reselection and was not able to perform a cell reselection to a cell asscoiated with NSAG with the highest priority (as specified in TS 38.304 [20]). |

**[Comments]**:

# X553

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| X553 | SONMDT | 1 | Incomplete field description |  | Xiaomi (Shuai) |  | V001 | ToDo |

**[Description]**: The definition of circleArea, distanceRadius IE is missed in field description part.

**[Proposed Change]**: Add the missed field description.

| ***LoggedMeasurementConfiguration* field descriptions** |
| --- |
| ***circleArea***  Used to describe a circle-shaped geographical area, in which include reference location and radius parameter. |
| ***distanceRadius***  Distance from the NTN coverage area reference location. Each step represents 50m. |

**[Comments]**:

# X554

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| X554 | SONMDT | 1 | Incomplete field description |  | Xiaomi (Shuai) |  | V001 | ToDo |

**[Description]**: The definition of referenceLocation IE in LoggedMeasurementConfiguration is missed in field description part, and the reference location should be restricted to (quasi-)Earth fixed cell. There are two reasons for this retriction: Firstly, reference location of earth-moving cell will change dynamicly and it can only be used when configured with epochTime. Secondly, the area scope checking concerning dynamic refeference location seems not reasonable due to NTN cells that serves the UE will change frequently.

**[Proposed Change]**: Add the missed field description.

| ***LoggedMeasurementConfiguration* field descriptions** |
| --- |
| ***referenceLocation***  Indicates the NTN coverage area reference location and is used in logged measurement for NTN (quasi-)Earth fixed cell. |

**[Comments]**:

# X555

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| X555 | SONMDT | 1 | Incomplete field description |  | Xiaomi (Shuai) |  | V001 | ToDo |

**[Description]**: distanceFromReference1, distanceFromReference2 IE only consider the case for earth-moving cell, the case that NTN cell is (quasi-)Earth fixed cell is missed.

**[Proposed Change]**: To complete the below field description when considering the reference location of (quasi-)Earth fixed cell is fixed.

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| *RLF-Report* field descriptions |
| ***distanceFromReference1***  This field indicates the measured distance between UE and the fixed reference location of the serving cell if the conditional handover is based on *condEventD1*. This field indicates the measured distance between UE and the moving reference locations of the serving cell if the conditional handover is based on *condEventD2*. Each step represents 50m. The actual distance shall be rounded down to the nearest step value (i.e., FLOOR(actual distance[m] / 50)). The maximum value is 65535, which indicates a distance equal to or greater than 65535 multiplied by 50m. |

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| *MeasResultNR* field descriptions |
| ***distanceFromReference2***  This field indicates the measured distance between UE and the fixed reference location of the serving cell if the conditional handover is based on *condEventD1.* This field indicates the measured distance between UE and the moving reference locations of associated neighbour cell if the conditional handover is based on *condEventD2*. Each step represents 50m. The actual distance shall be rounded down to the nearest step value (i.e., FLOOR(actual distance[m] / 50)). The maximum value is 65535, which indicates a distance equal to or greater than 65535 multiplied by 50m. |

**[Comments]**:

# X556

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| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| X556 | SONMDT | 2 | Missed cases when neigher of cho or cpc is fulfilled |  | Xiaomi (Shuai) |  | V001 | ToDo |

**[Description]**: When CHO with candidate SCGs are configured, and neither execution conditions for conditional handover or conditional PSCell change/addition was fulfilled, the current specs has not cover this scenario.

**[Proposed Change]**: Add “neither” for firstFulfilledConfig IE and fix the procedure text.

***Cho-WithCandidateSCGInfo* information element**

-- ASN1START

-- TAG-CHO-WITHCANDIDATESCGINFO-START

Cho-WithCandidateSCGInfo-r19 ::= SEQUENCE{

firstFulfilledConfig-r19 ENUMERATED {cho, cpc, neither} OPTIONAL,

timeBetweenFulfillment-r19 TimeBetweenEvent-r17 OPTIONAL,

timeBetweenLastFulfillmentAndEvent-r19 TimeBetweenEvent-r17 OPTIONAL,

fulfilledConfigWhenChoOnly-r19 ENUMERATED {cho, cpc, neither} OPTIONAL,

pCellId-r19 CHOICE {

cellGlobalId-r19 CGI-Info-Logging-r16,

pci-arfcn-r19 PCI-ARFCN-NR-r16

} OPTIONAL,

psCellId-r19 CHOICE {

cellGlobalId-r19 CGI-Info-Logging-r16,

pci-arfcn-r19 PCI-ARFCN-NR-r16

} OPTIONAL,

...

}

-- TAG-CHO-WITHCANDIDATESCGINFO-STOP

-- ASN1STOP

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| ***Cho-WithCandidateSCGInfo* field descriptions** |
| ***firstFulfilledConfig***  This field indicates if the execution conditions for conditional handover or conditional PSCell change/addition was fulfilled first or neither of them was fulfilled. |
| ***fulfilledConfigWhenChoOnly***  This field indicates if the execution conditions for conditional handover or conditional PSCell change/addition was fulfilled at the time of receiving a complementary conditional reconfiguration i.e., a conditional reconfiguration for a candidate PCell for which atleast one CHO with conditional SCG is already configured. |
| ***timeBetweenFulfillment***  This field logs the time between fulfilment of conditional handover and conditional PSCell change or addition execution conditions. |
| ***timeBetweenLastFulfillmentAndEvent***  This field logs the time between fulfilment of either conditional handover or conditional PSCell change or addition execution conditions and failure for RLF and SCG failure. |

**[Comments]**:

# H300

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| H300 | SONMDT | 1 | SHR indicator for LTM |  | Jun Chen |  | V004 | ToDo |

**[Description]**: In section 5.3.5.3, we wonder about the need of the following addition.

3> if the UE supports successful handover report for MCG LTM cell switch and if the UE has successful handover information available in *VarSuccessHO-Report* and if the RPLMN is included in *plmn-IdentityList* stored in *VarSuccessHO-Report*; or

3> if the UE supports successful handover report for MCG LTM cell switch and if the UE has successful handover information available in *VarSuccessHO-Report* and if the current registered SNPN identity is included in *snpn-IdentityList* stored in the *VarSuccessHO-Report*:

4> include *successHO-InfoAvailable* in the *RRCReconfigurationComplete* message;

Currently there is the following text, and we think it has covered any of handover types, and then it seems no need to add the above text.

2> if the UE has successful handover information available in VarSuccessHO-Report and if the RPLMN is included in plmn-IdentityList stored in VarSuccessHO-Report; or

2> if the UE has successful handover information available in VarSuccessHO-Report and if the current registered SNPN identity is included in snpn-IdentityList stored in the VarSuccessHO-Report:

3> include successHO-InfoAvailable in the RRCSetupComplete message;

**[Proposed Change]**: Suggest to remove the UE behaviour of including *successHO-InfoAvailable* in the *RRCReconfigurationComplete* message for LTM handover.

**[Comments]**:

# H301

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| H300 | SONMDT | 1 | CHO trigger condition |  | Jun Chen |  | V004 | ToDo |

**[Description]**: In section 5.3.10.5, for "time-based or location-based", we understand that the terminology has been used in TS 38.300, but they have not been used in TS 38.331. Insteadly, we have defined some trigger events. In this case, we suggest to clarify the trigger condition a bit.

if the UE supports RLF-Report for conditional handover with time-based or location-based trigger condition and if one entry of *choConfig* concerns *condEventD2*;

**[Proposed Change]**: if the UE supports RLF-Report for conditional handover with time-based or location-based trigger condition (e.g. *condEventD1, condEventD2* or *condEventT1*) and if one entry of *choConfig* concerns *condEventD2*;

**[Comments]**:

# H302

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| H302 | SONMDT | 1 | Logged MDT for NTN |  | Jun Chen |  | V004 | ToDo |

**[Description]**: In section 5.5a.3.2, the UE checks the logging internal when doing logging, and the interval can be put in the condition rather than the UE behaviours.

1> if *AreaConfigurationNTN-List* is included in *VarLogMeasConfig*:

2> if location information is available, and is outside of all areas indicated by *AreaConfigurationNTN-List*; or

2> if location information is not available:

3> skip the execution of the remainder of clause 5.5a.3.2 for the current logging interval (i.e. do not perform measurement logging for this interval);

**[Proposed Change]**: Suggested changes as shown as below:

1> if *AreaConfigurationNTN-List* is included in *VarLogMeasConfig* when performing the logging on a logging interval:

for

2> if location information is available, and is outside of all areas indicated by *AreaConfigurationNTN-List*; or

2> if location information is not available:

3> skip the execution of the remainder of clause 5.5a.3.2 for the ~~current~~ logging interval (i.e. do not perform measurement logging for ~~this~~ the logging interval);

**[Comments]**:

# H303

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| H303 | SONMDT | 1 | NTN deployment |  | Jun Chen |  | V004 | ToDo |

**[Description]**: For the following field description, the wording "NTN deployment" is confusing, and "NTN cells" is better.

***areaConfigurationNTN-List***

Used to restrict the geographic area in which the UE performs measurement logging for NTN deployment. The network does not configure *areaConfiguration* together with *areaConfigurationNTN-List*.

**[Proposed Change]**: In the field desription of areaConfigurationNTN-List, suggest to change "NTN deployment" into "NTN cells".

**[Comments]**:

# H304

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| H304 | SONMDT | 1 | areaConfigurationNTN-List |  | Jun Chen |  | V004 | ToDo |

**[Description]**: In section 6.2.2, for the following field description. We think the UE behaviours may also need to be added into the Note 1 below:

***areaConfigurationNTN-List***

Used to restrict the geographic area in which the UE performs measurement logging for NTN deployment. The network does not configure *areaConfiguration* together with *areaConfigurationNTN-List*.

NOTE 1: The UE should perform measurement logging based on the following area configuration limitations:

- If the *areaConfiguration-r16/areaConfiguration-r17* is present, and the *cag-ConfigList* is absent, the UE should perform logging in both PN and PNI-NPN based on *areaConfiguration-r16/areaConfiguration-r17*, if any;

- If the *areaConfiguration-r17* and the *cag-ConfigList* are present simultaneously, the UE should perform logging in PN within the *areaConfig-r16/areaConfig-r17* and perform logging in PNI-NPN within *cag-ConfigList*;

- If the *snpn-ConfigList* is present, the UE should perform logging only in SNPN based on *snpn-ConfigList*. The *snpn-ConfigList* should not be configured together with PN or PNI-NPN area configurations.

**[Proposed Change]**: Our suggestion is:

NOTE 1: The UE should perform measurement logging based on the following area configuration limitations:

- If the *areaConfiguration-r16/areaConfiguration-r17* is present, and the *cag-ConfigList* is absent, the UE should perform logging in both PN and PNI-NPN based on *areaConfiguration-r16/areaConfiguration-r17*, if any;

- If the *areaConfiguration-r17* and the *cag-ConfigList* are present simultaneously, the UE should perform logging in PN within the *areaConfig-r16/areaConfig-r17* and perform logging in PNI-NPN within *cag-ConfigList*;

- If the *snpn-ConfigList* is present, the UE should perform logging only in SNPN based on *snpn-ConfigList*. The *snpn-ConfigList* should not be configured together with PN or PNI-NPN area configurations.

- If the *areaConfigurationNTN-List* is present, the UE should perform logging only in this area configuration. The *areaConfigurationNTN-List* should not be configured together with *areaConfiguration*.

**[Comments]**:

# H305

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| H300 | SONMDT | 1 | subsequent CPC |  | Jun Chen |  | V004 | ToDo |

**[Description]**: In section 6.2.2, the wording "subsequent CPC" has not been used in this TS 38.331, and instead "subsequent CPAC" is used.

***previousPSCellId***

This field indicates the physical cell id and carrier frequency of the cell that is the source PSCell of the last PSCell change. In case of PSCell addition failure, this field is absent. In case of subsequent CPC, this field indicates the physical cell identity and carrier frequency of the source PSCell associated to the last executed CPC.

**[Proposed Change]**: In the field description of previousPSCellId, it is suggested to change "subsequent CPC" into "subsequent CPAC".

**[Comments]**:

# H306

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| H300 | SONMDT | 1 | SDT failure cause |  | Jun Chen |  | V004 | ToDo |

**[Description]**: In section 6.2.2, the field description can be improved, and normally the purpose should be indicated in the beginning.

***sdt-FailureCause***

This field is included when the RA report entry is included because of SDT and if the SDT procedure failed. Otherwise, the field is absent. This field indicates the SDT failure cause.

**[Proposed Change]**: Proposed change is shown as below:

***sdt-FailureCause***

This field indicates the SDT failure cause and it is included when the RA report entry is included because of SDT and if the SDT procedure failed. Otherwise, the field is absent. ~~This field indicates the SDT failure cause.~~

**[Comments]**:

# H307

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| H300 | SONMDT | 1 | SDT UL data volume |  | Jun Chen |  | V004 | ToDo |

**[Description]**: In section 6.2.2, the text is duplicated from the field description of the IE sdt-FailureCause, and it should be updated.

***sdt-UL-DataVolume***

The field is set to *t319a-expiry* upon expiration of T319a timer. If the UE upper layers receive *maxRetxThreshold* reached indication from RLC while SDT procedure is ongoing, this field is set to *maxRetxThreshold*. It is set to *preambleTransMax* upon the UE upper layer receiving indication of reaching preambleTransMax from the MAC layer. Upon expiration of cg-SDT-TimeAlignmentTimer from the MAC, the field is set to *cg-SDT-TimeAlignmentTimer*. The field is set to *configuredGrantTimer* upon reception of indication that configuration grant timer has been expired from the MAC. The field is set to *cellReselection* upon SDT failure due to UE’s cell re-selection.

**[Proposed Change]**: Suggest to:

***sdt-UL-DataVolume***

The field is set to indicate the UL data volume at the time of SDT evaluation as specified in TS 38.321 [3].

**[Comments]**:

# H308

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| H300 | SONMDT | 1 | Time since SDT execution |  | Jun Chen |  | V004 | ToDo |

**[Description]**: In section 6.2.2, the actual value may exceed the maximum one, so it should be clarified in the description below.

***timeSinceSdt-Execution***

This field logs the elapsed time since the execution of RA-SDT. Value in seconds. The maximum value is 172800 seconds.

**[Proposed Change]**: Suggest to:

***timeSinceSdt-Execution***

This field logs the elapsed time since the execution of RA-SDT. Value in seconds. The maximum value is 172800 seconds. If the time exceeds 172800 seconds, the UE shall set it to 172800 seconds.

**[Comments]**:

# H309

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| H300 | SONMDT | 1 | pCellId |  | Jun Chen |  | V004 | ToDo |

**[Description]**: In section 6.2.2, the wording "Alternatively" is confusing, and it can be improvded.

***pCellId***

This field is used to indicate the PCell to which the UE was connected when the successful PSCell change or addition triggers the *SuccessPSCell-Report*. Alternatively this field indicates the source PCell to which the UE was connected to before executing CHO with candidate SCG in which the *SuccessPSCell-Report* was triggered.

**[Proposed Change]**: Suggest to:

***pCellId***

This field is used to indicate the PCell to which the UE was connected when the successful PSCell change or addition triggers the *SuccessPSCell-Report*. In addition, ~~Alternatively~~ this field indicates the source PCell to which the UE was connected to before executing CHO with candidate SCG in which the *SuccessPSCell-Report* was triggered.

**[Comments]**:

# H310

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| H300 | SONMDT | 1 | fulfilledConfigWhenChoOnly |  | Jun Chen |  | V004 | ToDo |

**[Description]**: In section 6.3.2, in the IE *Cho-WithCandidateSCGInfo*, the IE *fulfilledConfigWhenChoOnly-r19* has three values, and there should be a spare value. So this spare value can be added.

fulfilledConfigWhenChoOnly-r19 ENUMERATED {cho, cpc, neither} OPTIONAL,

**[Proposed Change]**: Suggest to:

fulfilledConfigWhenChoOnly-r19 ENUMERATED {cho, cpc, neither, spare} OPTIONAL,

**[Comments]**:

# H311

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| H300 | SONMDT | 0 | a typo in atleast |  | Jun Chen |  | V004 | ToDo |

**[Description]**: In section 6.3.2, there is a typo in "atleast", i.e. there should be a space inside.

***fulfilledConfigWhenChoOnly***

This field indicates if the execution conditions for conditional handover or conditional PSCell change/addition was fulfilled at the time of receiving a complementary conditional reconfiguration i.e., a conditional reconfiguration for a candidate PCell for which atleast one CHO with conditional SCG is already configured.

**[Proposed Change]**: Suggest to change "atleast" into "at least".

**[Comments]**:

# N041

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| N041, N042 | SONMDT | 1 | RLF-Report for conditional handover with time-based or location-based trigger condition |  | Nokia (Mani) |  | V005 | ToDo |

**[Description]**: The reporting of distanceFromReference1 and distanceFromReference2 applies only to **MRO enhancement for CHO for NTN** as per the LS received in RAN2#129 from RAN3. But this is not very clear in the current specification text.

**[Proposed Change]**: Change as follows in 5.3.10.5. **Note that there are two instances in this clause where this change needs to be applied**:

“1> if the UE supports RLF-Report for conditional handover for NTN with time-based or location-based trigger condition and if one entry of *choConfig* concerns *condEventD2*”

**[Comments]**:

# N043

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| N043 | SONMDT | 2 | Value range for distanceRadius-r19 in AreaConfigurationNTN-r19 |  | Nokia (Mani) |  | V005 | ToDo |

**[Description]**: The value range for distanceRadius-r19 in AreaConfigurationNTN-r19 in TS 38.331 is defined as INTEGER (0..65535). This is not aligned with RAN3 definition of “Distance Radius” in IE Geographical Area in TS 38.413. RAN3 had defined it as INTEGER(1..65535).

**[Proposed Change]**: Align 38.331 with 38.413 and change the min value of distanceRadius-r19 in AreaConfigurationNTN-r19 to “1”.

**[Comments]**:

# N044

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| N044 | SONMDT | 1 | Definition of distanceFromReference1 in UEInformationResponse message |  | Nokia (Mani) |  | V005 | ToDo |

**[Description]**: The definition of distanceFromReference1 in UEInformationResponse message is not accurate.

**[Proposed Change]**:

***distanceFromReference1***

This field indicates the distance between UE and the moving reference locations of the serving cell if the conditional handover for NTN is based on *condEventD2*. Each step represents 50m. The actual measured distance shall be rounded down to the nearest lower step value. If the UE is within 50m of the moving reference location, the UE shall report a value of 0. The maximum value is 65535, which indicates a distance equal to or greater than 65535 multiplied by 50m.

**[Comments]**:

# N045

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RIL Id | WI | Class | Title | Tdoc | Delegate | Misc | File version | Status |
| N045 | SONMDT | 1 | Definition of distanceFromReference2 in MeasResults IE |  | Nokia (Mani) |  | V005 | ToDo |

**[Description]**: The definition of distanceFromReference2 in MeasResults IE is not accurate.

**[Proposed Change]**:

***distanceFromReference2***

This field indicates the distance between UE and the moving reference locations of associated neighbour cell if the conditional handover for NTN is based on *condEventD2*. Each step represents 50m. The actual measured distance shall be rounded down to the nearest lower step value. If the UE is within 50m of the moving reference location, the UE shall report a value of 0. The maximum value is 65535, which indicates a distance equal to or greater than 65535 multiplied by 50m.

**[Comments]**:

Instructions:

1. Copy the template RIL comments fields above (including the Heading Xnnn)
2. Paste the RIL comments fields at its position while **respecting the order of the RILs in the Review file (i.e. keep the order of the spec).**
3. Fill in the fields, see R19 ASN.1 Guideline.
4. Companies may comment whether they agree or disagree.
5. Can copy spec text and use Word “Track changes”, etc.
6. Do not delete text added by other companies.