**3GPP TSG- WG2 Meeting #127 *nnnn***

**Maastricht, NL, 3, 2024**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** |  | **rev** |  | **Current version:** |  |  |
|  | | | | | | | | |
| *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 | **X** | Radio Access Network | **X** | Core Network |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Rel-18 SONMDT Corrections | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson, Nokia, Samsung | | | | | | | | | |
| ***Source to TSG:*** | RAN2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_ENDC\_SON\_MDT\_enh2-Core | | | | |  | ***Date:*** | | | 2024-08-22 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***Release:*** | | | Rel-18 |
|  | *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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The CR captures the following agreements made in the RAN2#127 meeing.   * If attemptCondReconfig or attemptLTM-Switch are configured while initiating RRC Reestablishment procedure, UE keeps the successPSCell-Config configured by the PSCell. * UE keeps the successHO-Config and successPSCell-Config during full configuration. * Updating the field description of (cag-IdentityList) according to (R2-2407118) * RAN2 capture in the RRC spec that plmn-identityList is not included in case of MDT collection in SNPNs. E268 is closed. * RAN2 agree that similar to the procedural text for CEF in public network UE compares the registered snpn-identity with the snpn- identity logged in VarConnEstFailReport when appending the VarConnEstFailReport to the VarConnEstFailReportlist. * RAN2 agree to fix the missing correction in [R2-2405968] (changing VarConnEstFailReportlist to VarConnEstFailReport) in the next version of the RRC TS. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | The procedural text is corrected so:  The UE keeps the SPR configuration configured by the PSCell when performing CHO/LTM recovery. In addition the UE keeps the SPR configuration configured by the PSCell during full configuration  **Impact analysis**  Impacted functionality:  SPR  Inter-operability:   * If the network is implemented according to the CR and the UE is not, the network assumes that UE keeps the SPR configuration but the UE deletes the SPR configuration configured by the PSCell upon CHO/LTM recovery. This leads to inconsistent behaviour. * If the UE is implemented according to the CR and the network is not, then there are no interoperability issues.   cag-IdentityList field description is updated to be aligned with the RAN3 NG specification. In addition, plmn-identityList field description is updated to capture that it is not included in case of MDT configuration in SNPN.  **Impact analysis**  Impacted functionality:  Logged MDT  Inter-operability:   * If the network is implemented according to the CR and the UE is not, there is no inter-operability issue. * If the UE is implemented according to the CR and the network is not, then there are no interoperability issues.   Procedural text is updated so that the UE compares the registered snpn-identity with the snpn-identity logged in VarConnEstFailReport when appending the VarConnEstFailReport to the VarConnEstFailReportlist. In addition,Missing change according to (R2-2405968) (changing VarConnEstFailReportlist to VarConnEstFailReport) is captured.  **Impact analysis**  Impacted functionality:  CEF report  Inter-operability:   * If the network is implemented according to the CR and the UE is not, there is no inter-operability issue. * If the UE is implemented according to the CR and the network is not, then there are no interoperability issues. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | RRC spec is not aligned with the agreements made in the meeting RAN2#127. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.3.3.7, 5.3.5.11, 5.3.7.2, 6.2.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 change

#### 5.3.3.7 T300 expiry

The UE shall:

1> if timer T300 expires:

2> reset MAC, release the MAC configuration and re-establish RLC for all RBs that are established (except broadcast MRBs);

2> if the UE supports RRC Connection Establishment failure with temporary offset and the T300 has expired a consecutive *connEstFailCount* times on the same cell for which *connEstFailureControl* is included in *SIB1*:

3> for a period as indicated by *connEstFailOffsetValidity*:

4> use *connEstFailOffset* for the parameter *Qoffsettemp* for the concerned cell when performing cell selection and reselection according to TS 38.304 [20] and TS 36.304 [27];

NOTE 1: When performing cell selection, if no suitable or acceptable cell can be found, it is up to UE implementation whether to stop using *connEstFailOffset* for the parameter *Qoffsettemp* during *connEstFailOffsetValidity* for the concerned cell.

2> if the UE supports multiple CEF report:

3> if the UE is not in SNPN access mode and if the UE has connection establishment failure information or connection resume failure information available in *VarConnEstFailReport* and if the RPLMN is equal to *plmn-identity* in *networkIdentity* stored in *VarConnEstFailReport*; or

3> if the UE is in SNPN access mode and if the UE has connection establishment failure information or connection resume failure information available in *VarConnEstFailReport* and if the registered SNPN identity is equal to *snpn-Identity* in *networkIdentity* stored in *VarConnEstFailReport*:

4> if the cell identity of current cell is not equal to the cell identity stored in *measResultFailedCell* in *VarConnEstFailReport* and if the *maxCEFReport-r17* has not been reached:

5> append the *VarConnEstFailReport* as a new entry in the *VarConnEstFailReportList*;

2> if the UE is not in SNPN access mode and if the UE has connection establishment failure information or connection resume failure information available in *VarConnEstFailReport* and if the RPLMN is not equal to *plmn-identity* in *networkIdentity* stored in *VarConnEstFailReport*; or

2> if the UE is in SNPN access mode and if the UE has connection establishment failure information or connection resume failure information available in *VarConnEstFailReport* and if the registered SNPN identity is not equal to *snpn-Identity* in *networkIdentity* stored in *VarConnEstFailReport*; or

2> if the cell identity of current cell is not equal to the cell identity stored in *measResultFailedCell* in *VarConnEstFailReport*:

3> reset the *numberOfConnFail* to 0;

Next change

#### 5.3.5.11 Full configuration

The UE shall:

1> release/ clear all current dedicated radio configurations except for the following:

- the MCG C-RNTI;

- the AS security configurations associated with the master key;

- the SRB1/SRB2 configurations and DRB/multicast MRB configurations as configured by *radioBearerConfig* or *radioBearerConfig2*.

NOTE 1: Radio configuration is not just the resource configuration but includes other configurations like *MeasConfig*. Radio configuration also includes the RLC bearer configurations as configured by *RLC-BearerConfig*, PC5 Relay RLC channel as configured by *SL-RLC-ChannelConfig*, and Uu Relay RLC channel as configured by *Uu-RelayRLC-ChannelConfig*. In case NR-DC or NE-DC is configured, this also includes the entire NR or E-UTRA SCG configuration which are released according to the MR-DC release procedure as specified in 5.3.5.10.

NOTE 1a: For NR sidelink communication/discovery, the radio configuration includes the sidelink RRC configuration received from the network, but does not include the sidelink RRC reconfiguration and sidelink UE capability received from other UEs via PC5-RRC. In addition, the UE considers the new NR sidelink configurations as full configuration, in case of state transition and change of system information used for NR sidelink communication/discovery.

NOTE 1b: To establish the RLC bearer of SRB(s) after release due to *fullConfig*, the network can include the *srb-Identity* within *srb-ToAddModList* (i.e. the UE applies RLC default configuration) and/or provide *rlc-BearerToAddModList* of concerned SRB(s) explicitly.

- the logged measurement configuration;

- the *successHO-Config*;

- the *successPSCell-Config*.

1> if the *spCellConfig* in the *masterCellGroup* includes the *reconfigurationWithSync*:

2> release/ clear all current common radio configurations;

2> if *sl-PathSwitchConfig* was included in *reconfigurationWithSync*:

3> use the default values specified in 9.2.3 for timer T311;

2> else:

3> use the default values specified in 9.2.3 for timers T310, T311 and constants N310, N311;

1> else (full configuration after re-establishment or during RRC resume):

2> if the UE is acting as L2 U2N Remote UE:

3> use value for timer T311, as included in *ue-TimersAndConstants* received in *SIB1*

2> else:

3> use values for timers T301, T310, T311 and constants N310, N311, as included in *ue-TimersAndConstants* received in *SIB1*;

Next change

#### 5.3.7.2 Initiation

The UE initiates the procedure when one of the following conditions is met:

1> upon detecting radio link failure of the MCG and *t316* is not configured, in accordance with 5.3.10; or

1> upon detecting radio link failure of the MCG while SCG transmission is suspended, in accordance with 5.3.10; or

1> upon detecting radio link failure of the MCG while PSCell change or PSCell addition is ongoing, in accordance with 5.3.10; or

1> upon detecting radio link failure of the MCG while the SCG is deactivated, in accordance with 5.3.10; or

1> upon re-configuration with sync failure of the MCG, in accordance with clause 5.3.5.8.3; or

1> upon mobility from NR failure, in accordance with clause 5.4.3.5; or

1> upon integrity check failure indication from lower layers concerning SRB1 or SRB2, except if the integrity check failure is detected on the *RRCReestablishment* message; or

1> upon an RRC connection reconfiguration failure, in accordance with clause 5.3.5.8.2; or

1> upon detecting radio link failure for the SCG while MCG transmission is suspended, in accordance with clause 5.3.10.3 in NR-DC or in accordance with TS 36.331 [10] clause 5.3.11.3 in NE-DC; or

1> upon reconfiguration with sync failure of the SCG while MCG transmission is suspended in accordance with clause 5.3.5.8.3; or

1> upon SCG change failure while MCG transmission is suspended in accordance with TS 36.331 [10] clause 5.3.5.7a; or

1> upon SCG configuration failure while MCG transmission is suspended in accordance with clause 5.3.5.8.2 in NR-DC or in accordance with TS 36.331 [10] clause 5.3.5.5 in NE-DC; or

1> upon integrity check failure indication from SCG lower layers concerning SRB3 while MCG is suspended; or

1> upon T316 expiry, in accordance with clause 5.7.3b.5; or

1> upon detecting sidelink radio link failure by L2 U2N Remote UE in RRC\_CONNECTED which is not configured with MP, in accordance with clause 5.8.9.3; or

1> upon reception of *NotificationMessageSidelink* including *indicationType* by L2 U2N Remote UE in RRC\_CONNECTED which is not configured with MP, in accordance with clause 5.8.9.10; or

1> upon PC5 unicast link release for the serving L2 U2N Relay UE indicated by upper layer at L2 U2N Remote UE in RRC\_CONNECTED which is not configured with MP while T301 is not running; or

1> if MP is configured, upon detecting radio link failure of the MCG (i.e. direct path) in accordance with clause 5.3.10 while the transmission of indirect path is suspended as specified in 5.3.5.17; or

1> if MP is configured, upon detecting radio link failure of the MCG (i.e. direct path) in accordance with 5.3.10 while MP indirect path addition or change is ongoing; or

1> if MP is configured, upon detecting sidelink radio link failure of SL indirect path by L2 U2N Remote UE, in accordance with clause 5.8.9.3, while MCG transmission (i.e. direct path) is suspended as specified in clause 5.7.3b; or

1> if MP is configured, upon reception of *NotificationMessageSidelink* including *indicationType* in accordance with clause 5.8.9.10, while MCG transmission (i.e. direct path) is suspended as specified in clause 5.7.3b; or

1> if MP is configured, upon PC5 unicast link release indicated by upper layer at L2 U2N Remote UE, while MCG transmission (i.e. direct path) is suspended as specified in clause 5.7.3b; or

1> if MP is configured, upon detecting the failure of N3C indirect path by N3C remote UE in accordance with clause 5.7.3c, while MCG transmission (i.e. direct path) is suspended.

NOTE 0: It is up to UE implementation whether to initiate the procedure while T346g is running.

Upon initiation of the procedure, the UE shall:

1> stop timer T310, if running;

1> stop timer T312, if running;

1> stop timer T304, if running;

1> start timer T311;

1> stop timer T316, if running;

1> stop timer T421, if running;

1> if UE is not configured with *attemptCondReconfig*;and

1> if UE is not configured with *attemptLTM-Switch*:

2> reset MAC;

2> release *spCellConfig*, if configured;

2> suspend all RBs, and BH RLC channels for IAB-MT, and Uu Relay RLC channels for L2 U2N Relay UE, except SRB0 and broadcast MRBs;

2> release the MCG SCell(s), if configured;

2> if MR-DC is configured:

3> perform MR-DC release, as specified in clause 5.3.5.10;

2> perform the LTM configuration release procedure for the MCG and the SCG as specified in clause 5.3.5.18.7;

2> release *delayBudgetReportingConfig*, if configured and stop timer T342, if running;

2> release *overheatingAssistanceConfig*, if configured and stop timer T345, if running;

2> release *idc-AssistanceConfig*, if configured;

2> release *btNameList*, if configured;

2> release *wlanNameList*, if configured;

2> release *sensorNameList*, if configured;

2> release *drx-PreferenceConfig* for the MCG, if configured and stop timer T346a associated with the MCG, if running;

2> release *maxBW-PreferenceConfig* for the MCG, if configured and stop timer T346b associated with the MCG, if running;

2> release *maxCC-PreferenceConfig* for the MCG, if configured and stop timer T346c associated with the MCG, if running;

2> release *maxMIMO-LayerPreferenceConfig* for the MCG, if configured and stop timer T346d associated with the MCG, if running;

2> release *minSchedulingOffsetPreferenceConfig* for the MCG, if configured stop timer T346e associated with the MCG, if running;

2> release *rlm-RelaxationReportingConfig* for the MCG, if configured and stop timer T346j associated with the MCG, if running;

2> release *bfd-RelaxationReportingConfig* for the MCG, if configured and stop timer T346k associated with the MCG, if running;

2> release *releasePreferenceConfig*, if configured stop timer T346f, if running;

2> release *onDemandSIB-Request* if configured, and stop timer T350, if running;

2> release *referenceTimePreferenceReporting*, if configured;

2> release *sl-AssistanceConfigNR*, if configured;

2> release *obtainCommonLocation*, if configured;

2> release *musim-GapAssistanceConfig*, if configured and stop timer T346h, if running;

2> release *musim-GapPriorityAssistanceConfig*, if configured;

2> release *musim-LeaveAssistanceConfig*, if configured;

2> release *musim-CapabilityRestrictionConfig*, if configured and stop timer T346n, if running;

2> release*ul-GapFR2-PreferenceConfig*, if configured;

2> release *scg-DeactivationPreferenceConfig*, if configured, and stop timer T346i, if running;

2> release *propDelayDiffReportConfig*, if configured;

2> release *rrm-MeasRelaxationReportingConfig*, if configured;

2> release *maxBW-PreferenceConfigFR2-2*, if configured;

2> release *maxMIMO-LayerPreferenceConfigFR2-2*, if configured;

2> release *minSchedulingOffsetPreferenceConfigExt*, if configured;

2> release *multiRx-PreferenceReportingConfigFR2*, if configured, and stop timer T346m, if running;

2> release *aerial-FlightPathAvailabilityConfig*, if configured;

2> release *ul-TrafficInfoReportingConfig*, if configured, and stop all instances of timer T346l, if running;

1> release *successHO-Config*, if configured;

1> release *successPSCell-Config* configured by the PCell, if configured;

1> if any DAPS bearer is configured:

2> reset the source MAC and release the source MAC configuration;

2> for each DAPS bearer:

3> release the RLC entity or entities as specified in TS 38.322 [4], clause 5.1.3, and the associated logical channel for the source SpCell;

3> reconfigure the PDCP entity to release DAPS as specified in TS 38.323 [5];

2> for each SRB:

3> release the PDCP entity for the source SpCell;

3> release the RLC entity as specified in TS 38.322 [4], clause 5.1.3, and the associated logical channel for the source SpCell;

2> release the physical channel configuration for the source SpCell;

2> discard the keys used in the source SpCell (the KgNB key, the KRRCenc key, the KRRCint key, the KUPint key and the KUPenc key), if any;

1> release *sl-L2RelayUE-Config* for L2 U2N relay operation, if configured;

1> release *sl-L2RemoteUE-Config* for L2 U2N relay operation, if configured;

1> release the SRAP entity for L2 U2N relay operation, if configured;

1> release *ncr-FwdConfig*, if configured;

1> if the UE is NCR-MT:

2> indicate to NCR-Fwd to cease forwarding;

1> if SL indirect path is configured:

2> release cell identity and relay UE ID configured in *sl-IndirectPathAddChange*;

2> indicate upper layers to trigger PC5 unicast link release of the SL indirect path;

1> if N3C indirect path is configured:

2> release *n3c-IndirectPathAddChange*;

2> consider the non-3GPP connection is not used;

1> if the UE is acting as a N3C relay UE:

2> release *n3c-IndirectPathConfigRelay*;

2> consider the non-3GPP connection is not used;

1> if the UE is acting as L2 U2N Remote UE and MP via L2 U2N Relay UE is not configured:

2> if the PC5-RRC connection with the U2N Relay UE is determined to be released:

3> indicate upper layers to trigger PC5 unicast link release;

3> perform either cell selection in accordance with the cell selection process as specified in TS 38.304 [20], or relay selection as specified in clause 5.8.15.3, or both;

2> else (i.e., maintain the PC5 RRC connection):

3> consider the connected L2 U2N Relay UE as suitable and perform actions as specified in clause 5.3.7.3a;

NOTE 1: It is up to Remote UE implementation whether to release or keep the current PC5 unicast link.

1> else:

2> if the UE is capable of L2 U2N Remote UE:

3> perform either cell selection as specified in TS 38.304 [20], or relay selection as specified in clause 5.8.15.3, or both;

2> else:

3> perform cell selection in accordance with the cell selection process as specified in TS 38.304 [20].

NOTE 2: For L2 U2N Remote UE, if both a suitable cell and a suitable relay are available, the UE can select either one based on its implementation.

Next change

#### – *LoggedMeasurementConfiguration*

The *LoggedMeasurementConfiguration* message is used to perform logging of measurement results while in RRC\_IDLE or RRC\_INACTIVE. It is used to transfer the logged measurement configuration for network performance optimisation.

Signalling radio bearer: SRB1

RLC-SAP: AM

Logical channel: DCCH

Direction: Network to UE

*LoggedMeasurementConfiguration message*

-- ASN1START

-- TAG-LOGGEDMEASUREMENTCONFIGURATION-START

LoggedMeasurementConfiguration-r16 ::= SEQUENCE {

criticalExtensions CHOICE {

loggedMeasurementConfiguration-r16 LoggedMeasurementConfiguration-r16-IEs,

criticalExtensionsFuture SEQUENCE {}

}

}

LoggedMeasurementConfiguration-r16-IEs ::= SEQUENCE {

traceReference-r16 TraceReference-r16,

traceRecordingSessionRef-r16 OCTET STRING (SIZE (2)),

tce-Id-r16 OCTET STRING (SIZE (1)),

absoluteTimeInfo-r16 AbsoluteTimeInfo-r16,

areaConfiguration-r16 AreaConfiguration-r16 OPTIONAL, --Need R

plmn-IdentityList-r16 PLMN-IdentityList2-r16 OPTIONAL, --Need R

bt-NameList-r16 SetupRelease {BT-NameList-r16} OPTIONAL, --Need M

wlan-NameList-r16 SetupRelease {WLAN-NameList-r16} OPTIONAL, --Need M

sensor-NameList-r16 SetupRelease {Sensor-NameList-r16} OPTIONAL, --Need M

loggingDuration-r16 LoggingDuration-r16,

reportType CHOICE {

periodical LoggedPeriodicalReportConfig-r16,

eventTriggered LoggedEventTriggerConfig-r16,

...

},

lateNonCriticalExtension OCTET STRING OPTIONAL,

nonCriticalExtension LoggedMeasurementConfiguration-v1700-IEs OPTIONAL

}

LoggedMeasurementConfiguration-v1700-IEs ::= SEQUENCE {

sigLoggedMeasType-r17 ENUMERATED {true} OPTIONAL, -- Need R

earlyMeasIndication-r17 ENUMERATED {true} OPTIONAL, -- Need R

areaConfiguration-r17 AreaConfiguration-r17 OPTIONAL, --Need R

nonCriticalExtension LoggedMeasurementConfiguration-v1800-IEs OPTIONAL

}

LoggedMeasurementConfiguration-v1800-IEs ::= SEQUENCE {

areaConfiguration-v1800 AreaConfiguration-v1800 OPTIONAL, --Need R

nonCriticalExtension SEQUENCE {} OPTIONAL

}

LoggedPeriodicalReportConfig-r16 ::= SEQUENCE {

loggingInterval-r16 LoggingInterval-r16,

...

}

LoggedEventTriggerConfig-r16 ::= SEQUENCE {

eventType-r16 EventType-r16,

loggingInterval-r16 LoggingInterval-r16,

...

}

EventType-r16 ::= CHOICE {

outOfCoverage NULL,

eventL1 SEQUENCE {

l1-Threshold MeasTriggerQuantity,

hysteresis Hysteresis,

timeToTrigger TimeToTrigger

},

...

}

-- TAG-LOGGEDMEASUREMENTCONFIGURATION-STOP

-- ASN1STOP

| *LoggedMeasurementConfiguration* field descriptions |
| --- |
| ***absoluteTimeInfo***  Indicates the absolute time in the current cell. |
| ***areaConfiguration***  Used to restrict the area in which the UE performs measurement logging to cells broadcasting any of the included cell identities, the included tracking area codes/ frequencies, the included PNI-NPN identities or the SNPN identities. If *areaConfiguration-r17* is present, the UE shall ignore *areaConfiguration-r16*. The *areaConfiguration-v180*0 is a non-critical extension of *areaConfiguration-r17*. See NOTE 1. |
| ***earlyMeasIndication***  If included, the field indicates the UE is allowed to log measurements on early measurement related frequencies in logged measurements. |
| ***eventType***  The value outOfCoverage indicates the UE to perform logging of measurements when the UE enters any cell selection state, and the value eventL1 indicates the UE to perform logging of measurements when the triggering condition (similar as event A2 as specified in 5.5.4.3) as configured in the event is met for the camping cell in camped normally state. |
| ***plmn-IdentityList***  Indicates a set of PLMNs defining when the UE performs measurement logging as well as the associated status indication and information retrieval i.e. the UE performs these actions when the RPLMN is part of this set of PLMNs. The network does not include this field when the UE is configured with MDT configuration in SNPN access mode. |
| ***sigLoggedMeasType***  If included, the field indicates a signalling based logged measurement configuration (See TS 37.320 [61]). |
| ***tce-Id***  Parameter Trace Collection Entity Id: See TS 32.422 [52]. |
| ***traceRecordingSessionRef***  Parameter Trace Recording Session Reference: See TS 32.422 [52]. |
| ***reportType***  Parameter configures the type of MDT configuration, specifically Periodic MDT configuration or Event Triggerd MDT configuration. |

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.

Next change

#### – *AreaConfiguration*

The *AreaConfiguration* indicates area for which UE is requested to perform measurement logging. If not configured, measurement logging is not restricted to specific cells or tracking areas but applies as long as the RPLMN is contained in *plmn-IdentityList* stored in *VarLogMeasReport*.

*AreaConfiguration* information element

-- ASN1START

-- TAG-AREACONFIGURATION-START

AreaConfiguration-r16 ::= SEQUENCE {

areaConfig-r16 AreaConfig-r16,

interFreqTargetList-r16 SEQUENCE(SIZE (1..maxFreq)) OF InterFreqTargetInfo-r16 OPTIONAL -- Need R

}

AreaConfiguration-r17 ::= SEQUENCE {

areaConfig-r17 AreaConfig-r16 OPTIONAL, -- Need R

interFreqTargetList-r17 SEQUENCE(SIZE (1..maxFreq)) OF InterFreqTargetInfo-r16 OPTIONAL -- Need R

}

AreaConfiguration-v1800 ::= CHOICE {

cag-ConfigList-r18 CAG-ConfigList-r18,

snpn-ConfigList-r18 SNPN-ConfigList-r18

}

AreaConfig-r16 ::= CHOICE {

cellGlobalIdList-r16 CellGlobalIdList-r16,

trackingAreaCodeList-r16 TrackingAreaCodeList-r16,

trackingAreaIdentityList-r16 TrackingAreaIdentityList-r16

}

InterFreqTargetInfo-r16 ::= SEQUENCE {

dl-CarrierFreq-r16 ARFCN-ValueNR,

cellList-r16 SEQUENCE (SIZE (1..32)) OF PhysCellId OPTIONAL -- Need R

}

CellGlobalIdList-r16 ::= SEQUENCE (SIZE (1..32)) OF CGI-Info-Logging-r16

TrackingAreaCodeList-r16 ::= SEQUENCE (SIZE (1..8)) OF TrackingAreaCode

TrackingAreaIdentityList-r16 ::= SEQUENCE (SIZE (1..8)) OF TrackingAreaIdentity-r16

TrackingAreaIdentity-r16 ::= SEQUENCE {

plmn-Identity-r16 PLMN-Identity,

trackingAreaCode-r16 TrackingAreaCode

}

CAG-ConfigList-r18 ::= SEQUENCE (SIZE (1..maxNPN-r16)) OF CAG-Config-r18

CAG-Config-r18 ::= SEQUENCE {

plmn-Identity-r18 PLMN-Identity,

cag-IdentityList-r18 SEQUENCE (SIZE (1..maxNPN-r16)) OF BIT STRING (SIZE (32))

}

SNPN-ConfigList-r18 ::= CHOICE {

snpn-ConfigCellIdList-r18 SNPN-ConfigCellIdList-r18,

snpn-ConfigTAI-List-r18 SNPN-ConfigTAI-List-r18,

snpn-ConfigID-List-r18 SNPN-ConfigID-List-r18

}

SNPN-ConfigCellIdList-r18 ::= SEQUENCE (SIZE (1..maxSNPN-ConfigCellId-r18)) OF SNPN-ConfigCellId-r18

SNPN-ConfigCellId-r18 ::= SEQUENCE {

cgi-Identity-r18 CGI-Info-Logging-r16,

nid-IdentityList-r18 SEQUENCE (SIZE (1..maxNPN-r16)) OF NID-r16

}

SNPN-ConfigTAI-List-r18 ::= SEQUENCE (SIZE (1..maxSNPN-ConfigTAI-r18)) OF SNPN-ConfigTAI-r18

SNPN-ConfigTAI-r18 ::= SEQUENCE {

tai-Identity-r18 TrackingAreaIdentity-r16,

nid-IdentityList-r18 SEQUENCE (SIZE (1..maxNPN-r16)) OF NID-r16

}

SNPN-ConfigID-List-r18 ::= SEQUENCE (SIZE (1..maxSNPN-ConfigID-r18)) OF SNPN-ConfigID-r18

SNPN-ConfigID-r18 ::= SEQUENCE {

plmn-Identity-r18 PLMN-Identity,

nid-IdentityList-r18 SEQUENCE (SIZE (1..maxNPN-r16)) OF NID-r16

}

-- TAG-AREACONFIGURATION-STOP

-- ASN1STOP

| *AreaConfiguration* field descriptions |
| --- |
| ***cag-IdentityList***  The *cag-IdentityList* contains one or more CAG IDs. A PLMN ID may be present more than once within *CAG-ConfigList* *.* |
| ***InterFreqTargetInfo***  If configured, it indicates the neighbouring frequency and cells for which UE is requested to perform measurement logging. It can include sync raster or non-sync raster frequencies. |
| ***nid-IdentityList***  The *nid-IdentityList* contains one or more NID. All NIDs associated to the same PLMN ID are listed in the same *nid-IdentityList* entry. |