**3GPP TSG-RAN WG2 Meeting #130 R2-2504792**

**St.Julians, Malta, May 19th – 23rd, 2025**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **38.331** | **CR** | **5338** | **rev** | **1** | **Current version:** | **18.5.1** |  |
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| *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 | **X** | Radio Access Network | **X** | Core Network |  |

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| ***Title:*** | Corrections on RRC connection resume procedure initiated by activation or configuration of positioning SRS | | | | | | | | | |
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| ***Source to WG:*** | CATT, Samsung, Ericsson, vivo | | | | | | | | | |
| ***Source to TSG:*** | R2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_pos\_enh2-Core | | | | |  | ***Date:*** | | | 2025-05-08 |
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| ***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)* | |
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| ***Reason for change:*** | | The Rel-18 introduced part (with blue highlight) is not compatible with the existing “if-else” structure (with pink highlight), which may cause the UE-triggered RRC connection resumption for activation/configuration of positioning SRS to meet two judgment conditions: the “else” branch with pink highlight and one “if” branch with bule highlight. This ambiguity prevents ensuring the UE can set the resumeCause correctly.   |  | | --- | | 2> if the resumption occurs after release with redirect with *mpsPriorityIndication*:  3> set the *resumeCause* to *mps-PriorityAccess*;  2> else:  3> set the *resumeCause* in accordance with the information received from upper layers;  2> if the resumption of the RRC connection is triggered for activation of preconfigured SRS for positioning available in *srs-PosRRC-InactiveValidityAreaPreConfigList* and if the UE is camped in one of the cells indicated in one of *srs-PosConfigValidityArea*; or  2> if the resumption of the RRC connection is triggered due to the need for SRS for positioning configuration and no stored *srs-PosRRC-InactiveValidityAreaPreConfigList* for the camped cell exists; or  2> if the resumption of the RRC connection is triggered due to activation of non-preconfigured SRS for positioning with type semi-persistent available in *srs-PosRRC-InactiveValidityAreaNonPreConfig* and if the UE is camped in the cells indicated in *srs-PosConfigValidityArea*:  3> if an emergency service is ongoing:  4> select '2' as the Access Category;  4> set the *resumeCause* to *emergency*;  3> else:  4> set the *resumeCause* to *srs-PosConfigOrActivationReq*; | | | | | | | | | |
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| ***Summary of change:*** | | Move the conditions of initiating the RRC connection resume procedure on activation/configuration of positioning SRS to before the branch:  2> else:  3> set the *resumeCause* in accordance with the information received from upper layers;  And change the “if” to “else if” for the first condition.  **Impact analysis:**  Impacted 5G architecture options:  SA and NSA  Impacted functionality:  LPHAP.  Inter-operability:  1. If the UE supports this CR but the network does not, there is no inter-operability issue foreseen.  2. If the network supports this CR but the UE does not, the UE may set the wrong resumeCause. | | | | | | | | |
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| ***Consequences if not approved:*** | | The UE may set the wrong resumeCause. | | | | | | | | |
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| ***Clauses affected:*** | | 5.3.13.2 | | | | | | | | |
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|  | | **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:*** | | Revision of R2-2503497 | | | | | | | | |

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| CHANGE START |

#### 5.3.13.2 Initiation

The UE initiates the procedure when upper layers or AS (when responding to RAN paging, upon triggering RNA updates while the UE is in RRC\_INACTIVE, upon requesting multicast reception as specified in clause 5.3.13.1d, for NR sidelink communication/discovery/V2X sidelink communication as specified in clause 5.3.13.1a, for requesting configuration for SRS for positioning, for activation of preconfigured Positioning SRS in RRC\_INACTIVE, for activation of non-preconfigured Positioning SRS with type semi-persistent in RRC\_INACTIVE, upon receiving *RRCRelease* message including *resumeIndication*) requests the resume of a suspended RRC connection or requests the resume for initiating SDT as specified in clause 5.3.13.1b.

The UE shall ensure having valid and up to date essential system information as specified in clause 5.2.2.2 before initiating this procedure.

Upon initiation of the procedure, the UE shall:

1> if the resumption of the RRC connection is triggered by response to NG-RAN paging; or

1> if the resumption of the RRC connection is triggered by receiving *RRCRelease* message including *resumeIndication*; or

1> if the resumption of the RRC connection is triggered for multicast reception as specified in clause 5.3.13.1d:

2> select '0' as the Access Category;

2> perform the unified access control procedure as specified in 5.3.14 using the selected Access Category and one or more Access Identities provided by upper layers;

3> if the access attempt is barred, the procedure ends;

1> else if the resumption of the RRC connection is triggered by upper layers:

2> if the upper layers provide an Access Category and one or more Access Identities:

3> perform the unified access control procedure as specified in 5.3.14 using the Access Category and Access Identities provided by upper layers;

4> if the access attempt is barred, the procedure ends;

2> if the upper layers provide NSAG information and one or more S-NSSAI(s) triggering the access attempt (TS 23.501 [32] and TS 24.501 [23]):

3> apply the NSAG with highest NSAG priority among the NSAGs that are included in *SIB1* (i.e., in *FeatureCombination* and/or in *RA-PrioritizationSliceInfo*), and that are associated with the S-NSSAI(s) triggering the access attempt, in the Random Access procedure (TS 38.321 [3], clause 5.1);

NOTE 0: If there are multiple NSAGs with the same highest NAS-provided NSAG priority identified for access attempt as above, it is left to UE implementation to select the NSAG to be applied in the Random Access procedure.

2> if the resumption occurs after release with redirect with *mpsPriorityIndication*:

3> set the *resumeCause* to *mps-PriorityAccess*;

2> else if the resumption of the RRC connection is triggered for activation of preconfigured SRS for positioning available in *srs-PosRRC-InactiveValidityAreaPreConfigList* and if the UE is camped in one of the cells indicated in one of *srs-PosConfigValidityArea*; or

2> if the resumption of the RRC connection is triggered due to the need for SRS for positioning configuration and no stored *srs-PosRRC-InactiveValidityAreaPreConfigList* for the camped cell exists; or

2> if the resumption of the RRC connection is triggered due to activation of non-preconfigured SRS for positioning with type semi-persistent available in *srs-PosRRC-InactiveValidityAreaNonPreConfig* and if the UE is camped in the cells indicated in *srs-PosConfigValidityArea*:

3> if an emergency service is ongoing:

4> select '2' as the Access Category;

4> set the *resumeCause* to *emergency*;

3> else:

4> set the *resumeCause* to *srs-PosConfigOrActivationReq*;

1> else if the resumption of the RRC connection is triggered due to an RNA update as specified in 5.3.13.8:

2> if an emergency service is ongoing:

NOTE 1: How the RRC layer in the UE is aware of an ongoing emergency service is up to UE implementation.

3> select '2' as the Access Category;

3> set the *resumeCause* to *emergency*;

2> else:

3> select '8' as the Access Category;

2> perform the unified access control procedure as specified in 5.3.14 using the selected Access Category and one or more Access Identities to be applied as specified in TS 24.501 [23];

3> if the access attempt is barred:

4> set the variable *pendingRNA-Update* to *true*;

4> the procedure ends;

1> else if *srs-PosRRC-InactiveValidityAreaPreConfigList* or *srs-PosRRC-InactiveValidityAreaNonPreConfig* is configured:

2> if the resumption of the RRC connection is triggered due to cell reselection as specified in clause 5.3.13.6:

3> if an emergency service is ongoing:

4> select '2' as the Access Category;

4> set the *resumeCause* to *emergency*;

3> else:

4> select '8' as the Access Category;

4> set the *resumeCause* to *srs-PosConfigOrActivationReq*;

NOTE 2: In case the L2 U2N Relay UE initiates RRC connection resume triggered either by reception of message from a L2 U2N Remote UE via SL-RLC0 or SL-RLC1 as specified in 5.3.13.1a, or by reception of the *RemoteUEInformationSidelink* message containing the *connectionForMP* as specified in 5.3.13.1a, the L2 U2N Relay UE sets the *resumeCause* by implementation, but it can only set the *emergency*, *mps-PriorityAccess*, or *mcs-PriorityAccess* as *resumeCause*, if the same cause value in the message received from the L2 U2N Remote UE via SL-RLC0.

1> if the UE is in NE-DC or NR-DC:

2> if the UE does not support maintaining SCG configuration upon connection resumption:

3> release the MR-DC related configurations (i.e., as specified in 5.3.5.10) from the UE Inactive AS context, if stored;

1> if the UE does not support maintaining the MCG SCell configurations upon connection resumption:

2> release the MCG SCell(s) from the UE Inactive AS context, if stored;

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

2> establish a SRAP entity as specified in TS 38.351 [66], if no SRAP entity has been established;

2> apply the default configuration of SL-RLC1 as defined in 9.2.4 for SRB1;

2> apply the default PDCP configuration as defined in 9.2.1 for SRB1;

2> apply the default configuration of SRAP as defined in 9.2.5 for SRB1;

1> else:

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

2> apply the default SRB1 configuration as specified in 9.2.1;

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

1> release *delayBudgetReportingConfig* from the UE Inactive AS context, if stored;

1> stop timer T342, if running;

1> release *overheatingAssistanceConfig* from the UE Inactive AS context, if stored;

1> stop timer T345, if running;

1> release *idc-AssistanceConfig* from the UE Inactive AS context, if stored;

1> release *drx-PreferenceConfig* for all configured cell groups from the UE Inactive AS context, if stored;

1> stop all instances of timer T346a, if running;

1> release *maxBW-PreferenceConfig* and *maxBW-PreferenceConfigFR2-2* for all configured cell groups from the UE Inactive AS context, if stored;

1> stop all instances of timer T346b, if running;

1> release *maxCC-PreferenceConfig* for all configured cell groups from the UE Inactive AS context, if stored;

1> stop all instances of timer T346c, if running;

1> release *maxMIMO-LayerPreferenceConfig* and *maxMIMO-LayerPreferenceConfigFR2-2* for all configured cell groups from the UE Inactive AS context, if stored;

1> stop all instances of timer T346d, if running;

1> release *minSchedulingOffsetPreferenceConfig* and *minSchedulingOffsetPreferenceConfigExt* for all configured cell groups from the UE Inactive AS context, if stored;

1> stop all instances of timer T346e, if running;

1> release *rlm-RelaxationReportingConfig* for all configured cell groups from the UE Inactive AS context, if stored;

1> stop all instances of timer T346j, if running;

1> release *bfd-RelaxationReportingConfig* for all configured cell groups from the UE Inactive AS context, if stored;

1> stop all instances of timer T346k, if running;

1> release *releasePreferenceConfig* from the UE Inactive AS context, if stored;

1> release *wlanNameList* from the UE Inactive AS context, if stored;

1> release *btNameList* from the UE Inactive AS context, if stored;

1> release *sensorNameList* from the UE Inactive AS context, if stored;

1> release *obtainCommonLocation* from the UE Inactive AS context, if stored;

1> stop timer T346f, if running;

1> stop timer T346i, if running;

1> release *referenceTimePreferenceReporting* from the UE Inactive AS context, if stored;

1> release *sl-AssistanceConfigNR* from the UE Inactive AS context, if stored;

1> release *musim-GapAssistanceConfig* from the UE Inactive AS context, if stored and stop timer T346h, if running;

1> release *musim-GapConfig* from the UE Inactive AS context, if stored;

1> release *musim-GapPriorityAssistanceConfig* from the UE Inactive AS context, if stored;

1> release *musim-LeaveAssistanceConfig* from the UE Inactive AS context, if stored;

1> release *musim-CapabilityRestrictionConfig* from the UE Inactive AS context, if stored and stop timer T346n, if running;

1> release *propDelayDiffReportConfig* from the UE Inactive AS context, if stored;

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

1> release *rrm-MeasRelaxationReportingConfig* from the UE Inactive AS context, if stored;

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

1> release *aerial-FlightPathAvailabilityConfig* from the UE Inactive AS context, if stored;

1> release *ul-TrafficInfoReportingConfig* from the UE Inactive AS context, if stored;

1> stop all instances of timer T346l, if running;

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

2> apply the specified configuration of SL-RLC0 used for the delivery of RRC message over SRB0 as specified in 9.1.1.4;

2> apply the SDAP configuration and PDCP configuration as specified in 9.1.1.2 for SRB0;

1> else:

2> apply the CCCH configuration as specified in 9.1.1.2;

2> apply the *timeAlignmentTimerCommon* included in *SIB1*;

1> if *sdt-MAC-PHY-CG-Config* is configured:

2> if the resume procedure is initiated in a cell that is different to the PCell in which the UE received the stored *sdt-MAC-PHY-CG-Config*:

3> release the stored *sdt-MAC-PHY-CG-Config*;

3> instruct the MAC entity to stop the *cg-SDT-TimeAlignmentTimer*, if it is running;

1> if *ncd-SSB-RedCapInitialBWP-SDT* is configured:

2> if the resume procedure is initiated in a cell that is different to the PCell in which the UE received the stored *ncd-SSB-RedCapInitialBWP-SDT*:

3> release the stored *ncd-SSB-RedCapInitialBWP-SDT;*

1> if conditions for initiating SDT in accordance with 5.3.13.1b are fulfilled:

2> consider the resume procedure is initiated for SDT;

2> start timer T319a when the lower layers first transmit the CCCH message;

2> consider SDT procedure is ongoing;

1> else:

2> start timer T319;

2> instruct the MAC entity to stop the *cg*-*SDT*-*TimeAlignmentTimer*, if it is running;

1> if *ta-Report* or *ta-ReportATG* is configured with value *enabled* and the UE supports TA reporting:

2> indicate TA report initiation to lower layers;

1> set the variable *pendingRNA-Update* to *false*;

1> release *successHO-Config* from the UE Inactive AS context, if stored;

1> release *successPSCell-Config* configured by the PCell from the UE Inactive AS context, if stored;

1> release *successPSCell-Config* configured by the PSCell from the UE Inactive AS context, if stored;

1> initiate transmission of the *RRCResumeRequest* message or *RRCResumeRequest1* in accordance with 5.3.13.3.

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| CHANGE END |