**3GPP TSG-RAN WG3 Meeting #129-bisR3-257224**

Prague, Czech Republic, 13th ~17th Oct, 2025

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| --- |
| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  | **38.473** | **CR** | **1633** | **Rev** | **1** | **Current version:** | **19.0.0** |  |
|  |
| *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 | **x** | Core Network |  |

|  |
| --- |
|  |
| ***Title:***  | Correction on CSI-RS Resource Set and CSI IM Resource Transfer for inter-CU LTM |
|  |  |
| ***Source to WG:*** | Huawei, Jio Platforms, CATT, China Telecom, Lenovo, Nokia, ZTE, LGE, NEC, Google |
| ***Source to TSG:*** | R3 |
|  |  |
| ***Work item code:*** |  |  | ***Date:*** | 2025-10-14 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-19 |
|  | *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 canbe 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 following three IEs in the RRC LTM-Candidate IE are still missing in F1AP which cause related functions not workable:* ltm-NZP-CSI-RS-ResourceSet
* ltm-CSI-IM-Resource
* ltm-CSI-IM-ResourceSet
 |
|  |  |
| ***Summary of change:*** | To add the following IEs in LTM preparation related procedures.* ltm-NZP-CSI-RS-ResourceSet
* ltm-CSI-IM-Resource for periodic and semi-persistent
* ltm-CSI-IM-ResourceSet for periodic and semi-persistent
 |
|  |  |
| ***Consequences if not approved:*** | Some functions of inter-CU LTM are not workable.  |
|  |  |
| ***Clauses affected:*** | 9.3.1.360, 9.4.5  |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** | **x** |  |  Other core specifications  | TS38.423CR 1583 |
| ***affected:*** |  | **x** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **x** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** | v0, R3-257129 |

**<< Start of Changes >>**

9.3.1.360 CSI-RS Resource Configuration

This IE contains the CSI-RS resource configuration used for LTM.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **IE/Group Name** | **Presence** | **Range** | **IE type and reference** | **Semantics description** |
| Periodic CSI-RS Resource Configuration  | O |  |  NZP CSI-RS Resource Configuration9.3.1.x |  |
| Semi Persistent CSI-RS Resource Configuration | O |  |  NZP CSI-RS Resource Configuration9.3.1.x |  |
| CSI-RS Resource Configuration To Release List | O |  | OCTET STRING | Includes the*ltm-NZP-CSI-RS-ResourceToReleaseList*contained in the *LTM-Config* IE as defined in TS 38.331 [8]. |
| Periodic CSI-RS Resource Set Configuration | O |  | NZP CSI-RS Resource Set Configuration9.3.1.y |  |
| Semi-Persistent CSI-RS Resource Set Configuration | O |  | NZP CSI-RS Resource Set Configuration9.3.1.y |  |
| Periodic CSI-IM Resource Configuration | O |  | CSI-IM Resource Configuration9.2.3.z |  |
| Semi-Persistent CSI-IM Resource Configuration | O |  | CSI-IM Resource Configuration9.2.3.z |  |

**<< Next Change >>**

#### 9.3.1.x NZP CSI-RS Resource Configuration

This IE contains the CSI-RS resource configuration used for LTM.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| CSI-RS Resource to AddMod List | O |  | OCTET STRING | Contains the *ltm-NZP-CSI-RS-ResourceToAddModList* as defined in TS 38.331 [8]. |

#### 9.3.1.y NZP CSI-RS Resource Set Configuration

This IE contains the CSI-RS resource set configuration used for LTM.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| CSI-RS Resource Set to AddMod List | O |  | OCTET STRING | Includes *ltm-NZP-CSI-RS-ResourceSetToAddModList* contained in the *LTM-Config* IE as defined in TS 38.331 [10]. |

#### 9.2.3.z CSI-IM Resource Configuration

This IE contains the CSI-IM resource configuration used for LTM.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| CSI-IM Resource to AddMod List | O |  | OCTET STRING | Includes ltm-CSI-IM-ResourceToAddModList contained in the LTM-Config IE as defined in TS 38.331 [8]. |
| CSI-IM ResourceSet to AddMod List | O |  | OCTET STRING | Includes *ltm-CSI-IM-*ResourceSetToAddModList contained in the *LTM-Config* IE as defined in TS 38.331 [8]. |

**<< Next Change >>**

CSI-RSResourceConfig ::= SEQUENCE {

 periodicCSI-RSResourceConfiguration NZP-CSI-RS-ResourceConfiguration OPTIONAL,

 spCSI-RSResourceConfiguration NZP-CSI-RS-ResourceConfiguration OPTIONAL,

 periodicCSI-RSResourceSetConfiguration NZP-CSI-RS-ResourceSetConfiguration OPTIONAL,

 spCSI-RSResourceSetConfiguration NZP-CSI-RS-ResourceSetConfiguration OPTIONAL,

 periodicCSI-IMResourceConfiguration CSI-IM-ResourceConfiguration OPTIONAL,

 spCSI-IMResourceConfiguration CSI-IM-ResourceConfiguration OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { CSI-RSResourceConfig-ExtIEs} } OPTIONAL,

 ...

}

CSI-RSResourceConfig-ExtIEs F1AP-PROTOCOL-EXTENSION ::= {

 ...

}

**<< Next Change >>**

NZP-CSI-RS-ResourceConfiguration ::= SEQUENCE {

 cSI-RSResourceToAddModList OCTET STRING OPTIONAL,

 cSI-RSResourceToReleaseList OCTET STRING OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { NZP-CSI-RS-ResourceConfiguration-ExtIEs} } OPTIONAL,

 ...

}

NZP-CSI-RS-ResourceConfiguration-ExtIEs F1AP-PROTOCOL-EXTENSION ::= {

 ...

}

NZP-CSI-RS-ResourceSetConfiguration ::= SEQUENCE {

 cSI-RSResourceSetToAddModList OCTET STRING OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { NZP-CSI-RS-ResourceSetConfiguration-ExtIEs} } OPTIONAL,

...

}

NZP-CSI-RS-ResourceSetConfiguration-ExtIEs F1AP-PROTOCOL-EXTENSION ::= {

...

}

CSI-IM-ResourceConfiguration ::= SEQUENCE {

 cSI-IMResourceToAddModList OCTET STRING OPTIONAL,

 cSI-IMResourceSetToAddModList OCTET STRING OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { CSI-IM-ResourceConfiguration-ExtIEs} } OPTIONAL,

...

}

CSI-IM-ResourceConfiguration-ExtIEs F1AP-PROTOCOL-EXTENSION ::= {

 ...

}

**<< End of Changes >>**