**3GPP TSG-RAN WG3 Meeting #115-e *R3-222550***

**E-meeting, 21st February-3rd March- 2022**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **36.420** | **CR** | **0023** | **rev** | **7** | **Current version:** | **16.0.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **x** | Core Network |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | CPAC BL CR to TS 36.420 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | China Telecom | | | | | | | | | |
| ***Source to TSG:*** | R3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | LTE\_NR\_DC\_enh2-Core | | | | |  | ***Date:*** | | | 2022-02-23 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Rel-17 |
|  | *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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Add the support of CPAC. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | **RAN3#112-e:**   * Include the agreed TP in R3-212834.   **RAN3#114-e:**   * Include the agreed TP in R3-216167. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | CPAC cannot be supported. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.2.1.6 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | Rev 0: R3-212998, capture the agreed TP R3-212834.  Rev 1: R3-213193, resubmission based on latest version of spec.  Rev 2: R3-214279, change the author name.  Rev 3: R3-214631, resubmission based on latest version of spec.  Rev 4: R3-216247, capture the agreed TP R3-216167.  Rev 5: R3-220050, resubmission based on latest version of spec.  Rev 6: R3-221539, resubmission based on latest version of spec.  Rev 7: R3-222550, update the terminology in the sentence. | | | | | | | | |

/////////////////////////////////////////////////////////////**Start of the change**/////////////////////////////////////////////////////////////////////

## 5.1 Function list

The list of functions on the X2 interface is the following:

- Intra LTE-Access-System Mobility Support for ECM-CONNECTED UE:

- Context transfer from source eNB to target eNB;

- Control of user plane transport bearers between source eNB and target eNB;

- Handover cancellation;

- UE context release in source eNB;

- Dual Connectivity ;

- Handover Success Indication;

- Conditional Handover cancellation.

- Load Management

- Inter-cell Interference Coordination

- Uplink Interference Load Management;

- Downlink interference avoidance.

- General X2 management and error handling functions:

- Error indication;

- Reset.

- Application level data exchange between eNBs

- Trace functions

- Data exchange for self-optimisation

- EN-DC

5.2 Function description

5.2.1 Intra LTE-Access-System mobility support for ECM-CONNECTED UE

This function allows the eNB to handover the control of a certain UE to another eNB.

5.2.1.1 Context transfer from source eNB to target eNB

This function allows transferring information required to maintain the E-UTRAN services for an UE in ECM-CONNECTED from source to target eNB.

5.2.1.2 Control of user plane transport bearers between source eNB and target eNB

This function allows establishing and releasing transport bearers between source and target eNB to allow for data forwarding. At most one user plane transport bearer per E-RAB allocated to the UE may be established for relaying DL data received from the EPC from the source eNB to the target eNB. At most one user plane transport bearer per E-RAB allocated to the UE may be established for relaying the UL data received from the UE from the source eNB to the target eNB.

5.2.1.3 Handover cancellation

This function allows informing an already prepared target eNB that a prepared handover will not take place. It allows releasing the resources allocated during a preparation.

5.2.1.4 UE context release in source eNB

This function allows the target eNB to trigger the release of the resources allocated to the UE in the source eNB.

5.2.1.5 Dual Connectivity

This function allows MeNB and SeNB to support Dual Connectivity. MeNB and SeNB manage establishment, modification and release of UE context at the SeNB, and controls user plane tunnels over X2.

5.2.1.6 EN-DC

This function allows an MeNB and en-gNB to support Dual Connectivity. MeNB and en-gNB manage establishment, modification and release of UE context at the SeNB, and controls user plane tunnels over X2. This function also enables the delivery of F1-C traffic for IAB between MeNB and en-gNB.

This function also enables the conditional PSCell change cancel from the MeNB to the source en-gNB, to inform the cancellation of a list of prepared PSCells in the target en-gNB during a conditional PSCell change.

5.2.1.7 Handover Success Indication

This function allows informing a source eNB that the UE has successfully accessed a target eNB.

5.2.1.8 Conditional Handover Cancellation

This function allows informing a source eNB that resources reserved for candidate target cell(s) during a conditional handover preparation are about to be released by the target eNB.

5.2.2 Load management

This function allows exchanging overload and traffic load information between eNBs, such that the eNBs can control the traffic load appropriately. This information may be spontaneously sent to selected neighbour eNBs, or reported as configured by a neighbour eNB.

5.2.3 Inter-cell interference coordination

This function allows keeping inter-cell interference under control. For this neighbouring eNBs exchange appropriate information allowing that eNBs make radio resource assignments such that interference is mitigated.

///////////////////////////////////////////////////////////////////**End of the change /**////////////////////////////////////////////////////////////////////