**3GPP TSG-RAN WG2 Meeting #109bis-e *R2-200xxxx***

**Elbonia, Online, 20 – 30 April 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **36.300** | **CR** | **Num** | **rev** | **-** | **Current version:** | **16.1.0** |  |
|  | | | | | | | | |
| *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 | **x** | Radio Access Network | **x** | Core Network |  |

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| ***Title:*** | Stage-2 updates for IIOT (36.300) | | | | | | | | | |
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| ***Source to WG:*** | Nokia, Nokia Shanghai Bell | | | | | | | | | |
| ***Source to TSG:*** | R2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_IIOT-Core | | | | |  | ***Date:*** | | | 2020-05 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **Cat F** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
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| ***Reason for change:*** | | The description of EHC contexts handling during handover is not captured in specifications. | | | | | | | | |
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| ***Summary of change:*** | | Clarification is added in section 10.1.2.1 that EHC contexts re not transferred upon handover, but can be kept during intra-eNB handover. | | | | | | | | |
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| ***Consequences if not approved:*** | | The description of EHC feature is incomplete. | | | | | | | | |
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| ***Clauses affected:*** | | 10.1.2.1 | | | | | | | | |
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|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  |  | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  |  | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  |  | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

*First Modified Subclause*

10.1.2.1 Handover

The intra E-UTRAN HO of a UE in RRC\_CONNECTED state is a UE-assisted network-controlled HO, with HO preparation signalling in E-UTRAN:

- Part of the HO command comes from the target eNB and is transparently forwarded to the UE by the source eNB;

- To prepare the HO, the source eNB passes all necessary information to the target eNB (e.g. E-RAB attributes and RRC context):

- When CA is configured and to enable SCell selection in the target eNB, the source eNB can provide in decreasing order of radio quality a list of the best cells and optionally measurement result of the cells.

- When DC is configured, the source MeNB provides the SCG configuration (in addition to the MCG configuration) to the target MeNB.

- Both the source eNB and UE keep some context (e.g. C-RNTI) to enable the return of the UE in case of HO failure;

- If RACH-less HO is not configured, the UE accesses the target cell via RACH following a contention-free procedure using a dedicated RACH preamble or following a contention-based procedure if dedicated RACH preambles are not available:

- the UE uses the dedicated preamble until the handover procedure is finished (successfully or unsuccessfully);

- If RACH-less HO is configured, the UE accesses the target cell via the uplink grant preallocated to the UE in the RRC message. If the UE does not receive the preallocated uplink grant in the RRC message from the source eNB, the UE monitors the PDCCH of the target cell;

- If DAPS handover is configured, the UE continues the downlink user data reception from the source eNB until releasing the source cell and continues the uplink user data transmission to the source eNB until successful random access procedure to the target eNB. Upon reception of the handover command, the UE:

- Creates a MAC entity for target cell;

- Establishes an RLC entity and an associated DTCH logical channel for target cell for each DRB configured with DAPS;

- For the DRB(s) configured with DAPS, reconfigures the PDCP entity to DAPS PDCP entity with separate security and ROHC functions for source and target and associates them with the RLC entities configured for source and target respectively;

- Retains rest of the source link configurations until release of the source.

NOTE: The handling on RLC and PDCP for DRBs without DAPS is same as in normal handover.

- If the access towards the target cell (using RACH or RACH-less procedure) is not successful within a certain time, the UE initiates radio link failure recovery using a suitable cell except in DAPS handover or CHO scenarios:

- When DAPS handover fails, the UE reports the DAPS handover failure via the source without triggering RRC connection re-establishment if the source link is still available; Otherwise, RRC re-establishment is performed;

- When initial CHO execution attempt fails or HO fails, if network configured the UE to try CHO after HO/CHO failure and the UE performs cell selection to a CHO candidate cell, the UE attempts CHO execution to that cell; Otherwise, RRC re-establishment is performed.

- No ROHC and EHC context is transferred at handover;

- No UDC context is transferred at handover;

- ROHC and EHC contexts can be kept at handover within the same eNB.

*End of changes*