**3GPP TSG-SA5 Meeting #138e *S5-214367rev1***

**e-meeting 23- 31 August 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** |  | **rev** |  | **Current version:** | **17.1.0** |  |
|  | | | | | | | | |
| *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 |  | Radio Access Network | **X** | Core Network |  |

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| ***Title:*** | CHO requirements | | | | | | | | | |
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| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | E\_HOO | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***Category:*** |  |  | | | | | ***Release:*** | | |  |
|  | *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:*** | | Add requirements and use case for the development of management of CHO. | | | | | | | | |
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| ***Summary of change:*** | | Specification level requrements and use case for CHO management added. | | | | | | | | |
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| ***Consequences if not approved:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 3.3, 6.1.1.X, 6.4.1.X | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | |  | | |
| ***affected:*** | |  | **X** | Test specifications | | | |  | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | |  | | |
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| ***Other comments:*** | | This is input to the Rel-17 28.313 draft CR for WI E\_HOO. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | S5-206212, S5-213408 | | | | | | | | |

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| **First change** |

## 3.3 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in 3GPP TR 21.905 [1].

ANR Automatic Neighbour Relation

CHO Conditional Handover

NCR Neighbour Cell Relation

NG-RAN Next Generation Radio Access Network

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| **Next change** |

#### 6.1.1.X CHO management

**REQ-DCHO-FUN-1** The producer of NF provisioning MnS should have the capability allowing an authorized consumer to enable or disable Conditional Handover from one cell to another cell.

**REQ-DCHO-FUN-2** The producer of NF provisioning MnS should have the capability allowing an authorized consumer to configure parameters for the CHO function.

**REQ-DCHO-FUN-3** The producer of NF performance assurance MnS should have the capability to produce measurements related to CHO.

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| **Next change** |

#### 6.4.1.X CHO (Conditional Handover)

| Use case stage | Evolution/Specification | <<Uses>> Related use |
| --- | --- | --- |
| **Goal** | To configure CHO parameters in cells in order to improve CHO performance. |  |
| **Actors and Roles** | D-SON management function to support the CHO function. |  |
| **Telecom resources** | * gNB; * The producer of provisioning MnS. |  |
| **Assumptions** | N/A |  |
| **Pre-conditions** | * 5G NR cells are in operation. * CHO is not in operation from the source cell to the target cell. |  |
| **Begins when** | The D-SON management function intends to enable CHO from the source cell to the target cell. |  |
| **Step 1 (M)** | The D-SON management function requests the producer of NF provisioning MnS to configure parameters for the management of CHO on the source cell. |  |
| **Step 2 (M)** | The D-SON management function requests the producer of provisioning MnS to enable CHO from a source cell to a target cell. |  |
| **Step 3 (M)** | The CHO function detects handover issues (e.g. too late CHO, too early CHO and CHO to a wrong cell) by analysing reports from UEs and network side information, and acts to mitigate the CHO issues by adjusting CHO related RRC parameters sent from the gNB to the UE. |  |
| **Step 4 (M)** | The D-SON management function collects CHO related measurements and analyses them to evaluate the CHO performance. |  |
| **Step 5 (M)** | If the D-SON management function does not find the CHO performance satisfactory, it updates the configuration parameters for the CHO function. |  |
| **Ends when** | All the steps identified above are successfully completed. |  |
| **Exceptions** | One of the steps identified above fails. |  |
| **Post-conditions** | CHO is in operation from the source cell to the target cell. |  |
| **Traceability** | **REQ-DCHO-FUN-1, REQ-DCHO-FUN-2, REQ-DCHO-FUN-3** |  |

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| **End of changes** |