**3GPP TSG-SA5 Meeting #140-e *S5-216319***

**e-meeting, 15 - 24 November 2021**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **28.313** | **CR** | **-** | **rev** | **-** | **Current version:** |  |  |
|  | | | | | | | | |
| *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:*** | Conditional Handover services and procedures | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | E\_HOO | | | | |  | ***Date:*** | | | 2021-11-05 |
|  |  | | | |  | |  | | |  |
| ***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 services and procedures in order to complete CHO support. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Add services and procedures for CHO. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.1.x, 7.1.x.1, 7.1.x.2, 7.1.x.2.1, 7.1.x.2.2, 7.1.x.3, 7.1.x.3.1, 8.2.x | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | |  | | |
| ***affected:*** | |  | **X** | Test specifications | | | |  | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | |  | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | | This is input to the Rel-17 28.313 draft CR for WI E\_HOO. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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| **First change** |

### 7.1.x MRO for Conditional Handover (CHO)

#### 7.1.x.1 MnS component type A

MRO for CHO re-uses the component A for MRO, see clause 7.1.2.1.

#### 7.1.x.2 MnS Component Type B definition

##### 7.1.x.2.1 Control information

These parameters are used to control the CHO function.

Table 7.1.x.2.1-1: MRO fro CHO control

| Control parameter | Definition | Legal Values |
| --- | --- | --- |
| CHO function control | This attribute allows the operator to enable/disable the CHO functionality. See attribute choControl in TS 28.541 [13]. | Boolean  On, off |

##### 7.1.x.2.2 Parameters to be updated

MRO for CHO re-uses the same parameters to be updated as MRO, see clause 7.1.2.2.3.

#### 7.1.x.3 MnS Component Type C definition

##### 7.1.x.3.1 Performance measurements

Performance measurements related to MRO for CHO are captured in Table 7.1.x.3.1.-1:

Table 7.1.x.3.1-1. MRO for CHO related performance measurements

| Performance measurements | Description | Note |
| --- | --- | --- |
| Number of requested conditional handover preparations | Counts the number of successful and unsuccessful inter-gNB conditional handover preparations sent (see TS 28.552 clause 5.1.1.6.x.1) |  |
| Number of successful conditional handover preparations | Counts the number of unsuccessful inter-gNB conditional handover preparations sent (see TS 28.552 clause 5.1.1.6.x.2) |  |
| Number of failed conditional handover preparations | Counts the number of unsuccessful inter-gNB conditional handover preparations sent (see TS 28.552 clause 5.1.1.6.x.3) |  |
| Number of requested conditional handover resource allocations | Counts the number of successful and unsuccessful inter-gNB conditional handover preparations (see TS 28.552 clause 5.1.1.6.x.4) |  |
| Number of successful conditional handover resource allocations | Counts the number of successful inter-gNB conditional handover preparations (see TS 28.552 clause 5.1.1.6.x.5) |  |
| Number of failed conditional handover resource allocations | Counts the number of unsuccessful inter-gNB conditional handover preparations (see TS 28.552 clause 5.1.1.6.x.6) |  |
| Number of configured conditional handover candidates | Counts the number of outgoing inter-gNB conditional handover candidates requested (see TS 28.552 clause 5.1.1.6.x.7) |  |
| Number of UEs configured with conditional handover. | Counts the number of UEs that has been configured with inter-gNB conditional handover (see TS 28.552 clause 5.1.1.6.x.8) |  |
| Number of successful conditional handover executions | Counts the number of successful inter-gNB conditional handover executions received (see TS 28.552 clause 5.1.1.6.x.9) |  |
| Number of failed conditional handover executions | Counts the the number of failed inter-gNB conditional handover executions received (see TS 28.552 clause 5.1.1.6.x.10) |  |
| Mean Time of requested conditional handover executions | Counts the mean time of inter-gNB conditional handover executions (see TS 28.552 clause 5.1.1.6.x.11) |  |
| Max Time of requested conditional handover executions | Counts the max time of inter-gNB conditional handover executions (see TS 28.552 clause 5.1.1.6.x.12) |  |
| Number of configured conditional handover candidates | Counts the number of outgoing intra-gNB conditional handover candidates requested (see TS 28.552 clause 5.1.1.6.y.1) |  |
| Number of UEs configured with conditional handover | Countes the the number of UEs that has been configured with conditional handover (see TS 28.552 clause 5.1.1.6.y.2) |  |
| Number of successful conditional handover executions | Counts the number of successful intra-gNB conditional handover executions received (see TS 28.552 clause 5.1.1.6.y.3) |  |
| Number of requested conditional handover preparations | Counts the number of outgoing intra-gNB conditional handover preparations requested, for a split gNB deployment (see TS 28.552 clause 5.1.3.7.1.a) |  |
| Number of successful conditional handover preparations | Countes the number of successful intra-gNB conditional handover preparations, for a split gNB deployment (see TS 28.552 clause 5.1.3.7.1.b) |  |

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| **Next change** |

### 8.2.y MRO for Conditional Handover (CHO)

MRO for CHO re-uses the same procedures as for MRO, see clause 8.2.2.

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| **End of changes** |