**3GPP TSG-RAN WG2 Meeting #109-e *R2-20xxxxx***

**Electronic Meeting, 28th Feb – 6th Mar, 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **36.306** | **CR** | **1727** | **rev** | **1** | **Current version:** | **15.7.0** |  |
|  | | | | | | | | |
| *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:*** | Autonomous gap support for CGI reading | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Vivo, CMCC, NTT DOCOMO, CATT, Ericsson, Intel, Huawei, HiSilicon, MediaTek, Qualcomm incorporated, ZTE Corporation, Sanechips | | | | | | | | | |
| ***Source to TSG:*** | R2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI16, NR\_RRM\_Enh | | | | |  | ***Date:*** | | | 2020-02-27 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***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)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | * AT RAN2#108 meeting, RAN2 has discussed Autonomous Gap capability for CGI reporting [in TEI-16 and made the following agreement: * R2 assumes that autonomous gap is to be supported for CGI reading for: UE served by NR/LTE cell towards NR cell, UE served by NR cell towards LTE cell, expect to see CRs next meeting. * WID RP-191601 and RAN4’s LS (R4-1914782), for CGI reading with automous gap, various scenarios will be supported in Rel-16.   This CR is provided to capture the UE capabilities for supporting SI acquisition of LTE and NR neighbouring cell by using autonomous gap. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Adding following autonomous gap capabilities in section 4.3.11.7   * eutra-SI-AcquisitionForHO-ENDC * nr-AutonomousGaps-ENDC-FR1 * nr-AutonomousGaps-ENDC-FR2  nr-AutonomousGaps-FR1  * nr-AutonomousGaps-FR2 | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Network doesn’t know whether the LTE-served UE is able to perform ANR towards NR neighbours while using autonomous gap. | | | | | | | | |
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| ***Clauses affected:*** | | 4.3.11.7 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | | **X** |  | Other core specifications | | | | TS 36.331 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:*** | |  | | | | | | | | |

Start of 1st change

### 4.3.11 Neighbour cell SI acquisition parameters

#### 4.3.11.1 *intraFreqSI-AcquisitionForHO*

This parameter defines whether the UE supports, upon configuration of *si-RequestForHO* by the network, acquisition of relevant information from a neighbouring intra-frequency cell by reading the SI of the neighbouring cell using autonomous gaps and reporting the acquired information to the network as specified in TS 36.331 [5].

#### 4.3.11.2 *interFreqSI-AcquisitionForHO*

This parameter defines whether the UE supports, upon configuration of *si-RequestForHO* by the network, acquisition of relevant information from a neighbouring inter-frequency cell by reading the SI of the neighbouring cell using autonomous gaps and reporting the acquired information to the network as specified in TS 36.331 [5].

#### 4.3.11.3 *utran-SI-AcquisitionForHO*

This parameter defines whether the UE supports, upon configuration of *si-RequestForHO* by the network, acquisition of relevant information from a neighbouring UMTS cell by reading the SI of the neighbouring cell using autonomous gaps and reporting the acquired information to the network as specified in TS 36.331 [5].

#### 4.3.11.4 *reportCGI-NR-EN-DC-r15*

This parameter defines whether the UE supports acquisition of relevant information from a neighbouring NR cell by reading the SI of the neighbouring cell and reporting the acquired information to the network as specified in TS 36.331 [5] when the EN-DC is configured.

#### 4.3.11.5 *reportCGI-NR-NoEN-DC-r15*

This parameter defines whether the UE supports acquisition of relevant information from a neighbouring NR cell by reading the SI of the neighbouring cell and reporting the acquired information to the network as specified in TS 36.331 [5] when the EN-DC is not configured.

#### 4.3.11.6 *eutra-CGI-Reporting-ENDC*

This parameter defines whether the UE supports acquisition of relevant information from a neighbouring E-UTRA cell by reading the SI of the neighbouring cell and reporting the acquired information to the network as specified in TS 36.331 [5] when the (NG)EN-DC is configured wherein either MN and SN have different DRX cycles, or on-duration configured by MN does not contain on-duration configured by SN if their DRX cycles are same..

#### 4.3.11.7 *utra-GERAN-CGI-Reporting-ENDC*

This parameter defines whether the UE supports acquisition of relevant information from a neighbouring GERAN/UTRA cell by reading the SI of the neighbouring cell and reporting the acquired information to the network as specified in TS 36.331 [5] when the (NG)EN-DC is configured wherein either MN and SN have different DRX cycles, or on-duration configured by MN does not contain on-duration configured by SN if their DRX cycles are same.

#### 4.3.11.x1 *eutra-SI-AcquisitionForHO-ENDC*

This parameter defines whether the UE supports, upon configuration of *si-RequestForHO* by the network, acquisition of relevant information from a neighbouring E-UTRA cell by reading the SI of the neighbouring cell using autonomous gaps and reporting the acquired information to the network as specified in TS 36.331 [5] when the (NG)EN-DC is configured.

#### 4.3.11.x2 *nr-AutonomousGaps-ENDC-FR1*

This parameter defines whether the UE supports, upon configuration of *useAutonomousGapsNR* by the network, acquisition of relevant information from a neighbouring NR cell by reading the SI of the neighbouring cell on FR1 using autonomous gaps and reporting the acquired information to the network as specified in TS 36.331 [5] when it is configured with (NG)EN-DC..

#### 4.3.11.x3 *nr-AutonomousGaps-ENDC-FR2*

This parameter defines whether the UE supports, upon configuration of *useAutonomousGapsNR* by the network, acquisition of relevant information from a neighbouring NR cell by reading the SI of the neighbouring cell on FR2 using autonomous gaps and reporting the acquired information to the network as specified in TS 36.331 [5] when it is configured with (NG)EN-DC..

#### 4.3.11.x4 *nr-AutonomousGaps-FR1*

This parameter defines whether the UE supports, upon configuration of *useAutonomousGapsNR* by the network, acquisition of relevant information from a neighbouring NR cell by reading the SI of the neighbouring cell on FR1 using autonomous gaps and reporting the acquired information to the network as specified in TS 36.331 [5] when it is not configured with (NG)EN-DC..

#### 4.3.11.x5 *nr-AutonomousGaps-FR2*

This parameter defines whether the UE supports, upon configuration of *useAutonomousGapsNR* by the network, acquisition of relevant information from a neighbouring NR cell by reading the SI of the neighbouring cell on FR2 using autonomous gaps and reporting the acquired information to the network as specified in TS 36.331 [5] when it is not configured with (NG)EN-DC..

End of 1st change