**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** |
|  |
|  | **36.306** | **CR** |  **1727** | **rev** | **1** | **Current version:** | **15.7.0** |  |
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| *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 canbe 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:*** | * 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. |
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| ***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
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| ***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 |
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|  | **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 ...  |
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| ***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