3GPP TSG-RAN WG2 #111-e R2-200xxxx

Electronic Meeting, 17th – 28th August 2020

Agenda Item: 6.8.3.3

Source: Ericsson

Title: [AT111-e][210][DCCA] Other DCCA Corrections

Document for: Discussion, Decision

# 1 Introduction

This document is to kick off the following email discussion:

* [AT111-e][210][DCCA] Other DCCA Corrections (Ericsson)

Scope:

* + - Collect companies’ feedback for the contributions under 6.8.1 and 6.8.3.3 marked for this email discussion
		- Proponents may provide updated versions (if needed) under this email discussion (Tdoc numbers can be requested for this purpose from the session chair or the RAN2 secretary)

Intended outcome:

* + - Discussion summary in [R2-2008140](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_111-e/Docs//R2-2008140.zip) (by email rapporteur).
		- Session chair proposes agreements after the summary report is available

Deadline for providing comments, for rapporteur inputs, conclusions and CR finalization:

* + - Deadline for companies' feedback: Thursday 2020-08-20 09:00 UTC
		- Deadline for rapporteur's summary (in [R2-2008140](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_111-e/Docs//R2-2008140.zip)): Friday 2020-08-21 09:00 UTC
		- Deadline for CR finalization (for agreed CRs): Thursday 2020-08-27 07:00 UTC

# 2 Discussion

To make it easier to find the correct contact delegate in each company for potential follow-up questions, the rapporteur encourages the delegates who provide input to provide their contact information in this table:

|  |  |
| --- | --- |
| Company | Delegate contact |

|  |  |
| --- | --- |
| ZTE | LiuJing (liu.jing30@zte.com.cn) |
| Jarkko | Jarkko Koskela (Jarkko.t.koskela@nokia.com) |
| Huawei | David Lecompte (david.lecompte@huawei.com) |
| NEC | Hisashi Futaki (hisashi.futaki[at]nec.com) |
| Qualcomm | Peng Cheng (chengp@qti.qualcomm.com) |
| OPPO | Shukun Wang (wangshukun@oppo.com) |
| Google | Frank Wu (frankwu@google.com) |
| CATT | Chandrika Worrall (chandrika@catt.cn) |
| Ericsson | Stefan Wager (stefan.wager@ericsson.com) |
| MediaTek | Chun-Fan (Felix) Tsai (Chun-Fan.Tsai@mediatek.com) |
| Samsung | Himke van der Velde (himke.vandervelde@samsung.com) |

Companies are requested to add their comments for each of the treated CRs of this email discussion in the boxes below.

## 2.1 General and Stage 2 Corrections

[R2-2007690](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_111-e/Docs//R2-2007690.zip) Correction on power coordination in NR-DC Huawei, HiSilicon CR Rel-16 37.340 16.2.0 0224 - F LTE\_NR\_DC\_CA\_enh-Core

*Rapporteur comment: Minor addition that maximum power is coordinated between MN and SN in NR-DC. Rapporteur proposes this could be added to 37.340 rapporteur CR.*

|  |  |  |
| --- | --- | --- |
| Company | Agree CR?(Yes or No) | Comments |
| ZTE |  Yes | Would be fine to include it in the Rapporteur CR.  |
| Nokia | Yes |  |
| Huawei | Yes (proponent) |  |
| NEC | Yes | can add this in Rapp CR |
| Qualcomm | Yes | Agree with rapporteur |
| OPPO | Yes  | Agree the change. I wonder if other information should also be captured, e.g. measurement id list, DRB id list and so on. |
| Google | Yes | Agree with rapporteur |
| CATT | yes |  |
| Ericsson | Yes | Add to rapporteur CR |
| Samsung | Yes |  |

[R2-2006897](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_111-e/Docs//R2-2006897.zip) CR to 37.340 on SCG resume procedure ZTE Corporation, Sanechips CR Rel-16 37.340 16.2.0 0217 - F LTE\_NR\_DC\_CA\_enh-Core

*Rapporteur comment: Agree to the principle of CR, but some questions arise:*

*- In updated figure 10.12.2-3, the box 11b is not needed. In figure 10.12.2-2, the box 8 is used to simplify the figure by hiding the resume signalling. In figure 10.12.2-3, the signalling is explicitly shown.*

*- In figure 10.12.2-2 RRCReconfiguration is used in the figure between the MN and the UE, whereas the describing text uses RRCConnectionReconfiguration. We should probably update these at the same time and align with wording in figure 10.12.2-3, which uses both NR and EUTRA cases.*

|  |  |  |
| --- | --- | --- |
| Company | Agree CR?(Yes or No) | Comments |
| ZTE | Yes (proponent) | Regarding the question from the Rapporteur. 1. Agree, box 1b should be removed.
2. Agree to align 10.12.2-2 with 10.12.2-3, thanks for checking.
 |
| Nokia | Yes | Agree with rapporteur comment. |
| Huawei | Yes | By the way, you could use MSC generator for the modified figure, which is gradually used in all RAN2 specifications |
| NEC | Yes | Agree with Rapporteur  |
| Qualcomm | Yes | Agree with rapporteur comment. |
| OPPO | Yes  |  |
| Google | Yes | Agree with rapporteur’s comments. Besides, we have some comments.1. The UE has to perform the random access procedure so step 14 should be solid line.
2. WI code in the coversheet should be updated to LTE\_NR\_DC\_CA\_enh-Core.
3. The step 8 should cover exchanging RRC Paging and RRC Resume Request messages.
4. In step 11, “The RRC (Connection) Resume procedure commences” should have been covered by step 8.
5. We proposed changes to clarify 3) and 4) in R3-205158 but RAN3 does not have time to treat it. If rapporteur is ok the changes for steps 8 and 11, please include the changes in the rapporteur’s updated CR.
 |
| CATT | Yes | Agree with Rapporteur |
| Ericsson | Yes |  |
| Samsung | Yes | Agree with Rapporteur |

## 2.2 CA aspects (related to RAN1-led features)

[R2-2007221](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_111-e/Docs//R2-2007221.zip) Adding enableDefaultBeamForCSS for cross-carrier scheduling with different SCS vivo CR Rel-16 38.331 16.1.0 1803 - F LTE\_NR\_DC\_CA\_enh-Core

*Rapporteur comment: Agree to the principle of the CR, but impact analysis is missing!*

|  |  |  |
| --- | --- | --- |
| Company | Agree CR?(Yes or No) | Comments |
| ZTE | Yes with changes | According to 38.214, RAN1 spec already defined the UE behaviour when the the field is absent. Considering the field description includes a reference to RAN1 spec, we think the statement of “if not present, Rel-15 behaviour is used” can be removed .

|  |
| --- |
| ***enableDefaultBeamForCCS***This field indicates whether default beam selection for cross-carrier scheduled PDSCH is enabled, see TS 38.214 [19]. ~~If not present, Rel-15 behaviour is used.~~ |

In addition, RAN1 spec added “[ ]” to the field name, because they think the field name can be determined by RAN2. We prefer to rename the field into “enableDefaultBeam-ForCCS” to align with other similar fields, but no strong view. enableDefaultBeamPL-ForPUSCH0-r16 ENUMERATED {enabled} OPTIONAL, -- Need R enableDefaultBeamPL-ForPUCCH-r16 ENUMERATED {enabled} OPTIONAL, -- Need R enableDefaultBeamPL-ForSRS-r16 ENUMERATED {enabled} OPTIONAL, -- Need R |
| Nokia | Yes | Agree with rapporteur comment. |
| Huawei | Yes | (the dash mentioned by ZTE seems was used to separate the parameter from the physical channel/signal, this is not just because of the word "For", so suggest not to do this) |
| NEC | Yes | slight preference is to capture the case of “if not present” (but it may need to be reworded), as this is to be added with Need S. |
| Qualcomm | Yes | For ZTE comment, we think the presence condition can be captured because RAN1 LS explicitly indicated this condition. However, as NEC mentioned, the wording pf presence condition needs refined, e.g."If not present, the default beam selection behaviour is not applied, i.e. Rel-15 behavior is applied" |
| OPPO | Yes  |  |
| Google | Yes | Agree with the rapporteur’s comment. |
| CATT | Yes | Agree with rapporteur comment |
| Ericsson | Yes | Please add impact analysis. |
| Samsung | Yes | Agree with rapporteur comment. Whenever IE is included, there will be extension marker overhead to keep feature enabled (but seems there is no delta at this level, so probably fine. Otherwise Boolean should be used)  |

[R2-2007008](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_111-e/Docs//R2-2007008.zip) Correction on the Field Description for Field Using SetupRelease Structure CATT CR Rel-16 38.331 16.1.0 1769 - F LTE\_NR\_DC\_CA\_enh-Core

*Rapporteur comment: The CR proposes to replace “present/included” with “configured” in the field description for fields of SetupRelease type, referring to the agreement last meeting to “Remove conditional presence for SetupRelease fields and move the intended network behaviour to field description”. Reason for change mentions that “It is ambiguous whether the descriptions prevent the release of the field.” It is not clear what is meant with this and whether the proposed changes are really needed?*

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| --- | --- | --- |
| Company | Agree CR?(Yes or No) | Comments |
| ZTE | Yes with comments | We understand the intention of the CR is clarify that network is allowed to provide the field (e.g. set to release) when the condition is not fulfilled. For instance, for T316 timer, when network releases the split SRB1 or SRB3, network may want to release T316 configuration in the same message. But seems the “present” disallows network to include the field (even if the field is set to “release”). “This field can be present only if the UE is configured with split SRB1 or SRB3”The similar clarification has been discussed before (for several fields), and most of them are concluded to be included in Rapporteur CR. So we are fine with the correction, but prefer to include in Rapporteur CR.  |
| Nokia | Yes |  |
| Huawei | Yes | but in the field description of outsideActiveTimeConfig, "confiugred" should be changed to "configured"  |
| NEC | Yes | good to add into the Rapp CR |
| Qualcomm | Yes | Agree with rapporteur’s comments.  |
| OPPO | Yes  |  |
| Google | Yes | Agree with the rapporteur’s comments. |
| CATT | Yes | Using the word “present/included”, it seems that the T316 must be there which can not be released, we think the word “configured” is more suitable. |
| Ericsson | Yes | This clarification can be added to rapporteur CR |
| MediaTek | Yes | Also agree that this could be put in rapporteur CR |
| Samsung | Yes | Rap CR seems fine |

[R2-2007882](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_111-e/Docs//R2-2007882.zip) Clarification on CA slot offset configuration MediaTek Inc. CR Rel-16 38.331 16.1.0 1941 - F LTE\_NR\_DC\_CA\_enh-Core

*Rapporteur comment: Agree to the principle of the CR. Another way could be to define the restriction to SCell addition in the field condition, e.g. “This field is mandatory present for SCell addition whose slot offset between the SpCell is not 0. Otherwise it is absent, Need S.”*

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| --- | --- | --- |
| Company | Agree CR?(Yes or No) | Comments |
| ZTE | Yes | The correction in the CR looks simpler than adding a new condition.  |
| Nokia | Yes | It’s just aligning with the principle that SCells cannot be changed very dynamically for the “fundamental” configurations (e.g. PUCCH group) but must be done with release and add |
| Huawei | Not sure | If the intention is what said by Nokia, we agree but the proposed description is not clear.What is the intention at SCell reconfiguration? That the network always repeats the value provided at SCell addition? Or that the network does not repeat the value and the UE remembers it? |
| NEC | Yes | agree with the intention |
| Qualcomm | Yes | We agree the intention, i.e. it can’t be reconfigured on-the-flyWe also prefer the correction of the CR, instead of adding new condition. |
| OPPO | yes |  |
| Google | Yes |  |
| CATT | No strong view |  |
| Ericsson | Yes | Since this is a minor clarification of network behaviour, we propose this can be added in rapporteur CR. |
| MediaTek | Yes (Proponent) | We are also fine to put this in rapporteur CR.Regarding to the question from Huawei, “What is the intention at SCell reconfiguration? That the network always repeats the value provided at SCell addition? Or that the network does not repeat the value and the UE remembers it?”My comment as following:The CR does not really touch the aspect the whether the NW has to repeat the same CA slot offset value every time the SCell is reconfigured. We simply saying if the NW want to change this value, it should be done by release and add of SCell. In my understanding the NW does not have to repeat this value if no change. The UE will continue to use the same value. |
| Samsung | Yes | Approach used in CR seems fine |

[R2-2006886](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_111-e/Docs//R2-2006886.zip) Add tdm-PatternConfig-r16 in the inter-node message Google Inc. CR Rel-16 36.331 16.1.1 4361 - F LTE\_NR\_DC\_CA\_enh-Core

*Rapporteur comment: AS-Config-v1550 already includes the TDM pattern. The Rel-16 field was added to allow setting the TDM pattern also in RRCResume message (in addition to RRCReconfiguration), but it uses the same Rel-15 definition. There is only one TDM pattern per UE, either tdm-PatternConfig or tdm-PatternConfig2.*

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| --- | --- | --- |
| Company | Agree CR?(Yes or No) | Comments |
| ZTE | See comment | Not sure whether the intention is to capture below new tdm-PatternConfig2 in INM? We understand RAN2 defined separate fields in RRCConnectionReconfigration message for different purpose. If this is the intention of CR, it is better to make it clear in field descriptions. We also wonder whether the network(target cell) can obtain this information from other configuration?

|  |
| --- |
| ***tdm-PatternConfig***This field is used when power control or IMD issues require single UL transmission in (NG)EN-DC as specified in TS 38.101-3 [101] and TS 38.213 [88]. |
| ***tdm-PatternConfig2***This field is used for dual UL transmission in EN-DC with LTE FDD PCell and for single UL transmission in EN-DC with LTE FDD/TDD PCell, as specified in TS 38.101-3 [101] and TS 38.213 [88].The network sets at most one of *tdm-PatternConfig* and *tdm-PatternConfig2* to setup.When this field is configured in EN-DC with LTE TDD PCell, it is not applicable if TDD configuration is sa0 or sa6 in SIB1. |

 |
| Nokia |  | Agree with rapporteur. |
| Huawei | Yes | but also agree with ZTE that we need to clarify the field descriptions. Minor comment: the newly imported type could be used also for the existing field. |
| NEC |  | similar view as Rapporteur, while want to know better real intention for this, e.g. as commented by ZTE, and whether actually it is needed? |
| Qualcomm |  | Same view as Rapporteur |
| OPPO |  | Same view as Rapporteur |
| Google | Yes | As commented by Rapporteur, tdm-PatternConfig and tdm-PatternConfig2 are used for different purposes. The tdm-PatternConfig2 field is in the non-critical extension of RRCConnectionReconfiguration message instead of RadioResourceConfigDedicated IE, like the tdm-PatternConfig field. RRCConnectionReconfiguration-v1510-IEs ::= SEQUENCE { nr-Config-r15 CHOICE { release NULL, setup SEQUENCE { endc-ReleaseAndAdd-r15 BOOLEAN, nr-SecondaryCellGroupConfig-r15 OCTET STRING OPTIONAL, -- Need ON p-MaxEUTRA-r15 P-Max OPTIONAL -- Need ON } } OPTIONAL, -- Need ON sk-Counter-r15 INTEGER (0.. 65535) OPTIONAL, -- Need ON nr-RadioBearerConfig1-r15 OCTET STRING OPTIONAL, -- Need ON nr-RadioBearerConfig2-r15 OCTET STRING OPTIONAL, -- Need ON tdm-PatternConfig-r15 TDM-PatternConfig-r15 OPTIONAL, -- Cond FDD-PCell nonCriticalExtension RRCConnectionReconfiguration-v1530-IEs OPTIONAL}RRCConnectionReconfiguration-v1530-IEs ::= SEQUENCE { securityConfigHO-v1530 SecurityConfigHO-v1530 OPTIONAL, -- Cond HO-5GC sCellGroupToReleaseList-r15 SCellGroupToReleaseList-r15 OPTIONAL, -- Need ON sCellGroupToAddModList-r15 SCellGroupToAddModList-r15 OPTIONAL, -- Need ON dedicatedInfoNASList-r15 SEQUENCE (SIZE(1..maxDRB-r15)) OF DedicatedInfoNAS OPTIONAL, -- Cond nonHO p-MaxUE-FR1-r15 P-Max OPTIONAL, -- Need OR smtc-r15 MTC-SSB-NR-r15 OPTIONAL, -- Need OP nonCriticalExtension RRCConnectionReconfiguration-v1610-IEs OPTIONAL}RRCConnectionReconfiguration-v1610-IEs ::= SEQUENCE { conditionalReconfiguration-r16 ConditionalReconfiguration-r16 OPTIONAL, -- Need ON daps-SourceRelease-r16 ENUMERATED{true} OPTIONAL, -- Need ON tdm-PatternConfig2-r16 TDM-PatternConfig-r15 OPTIONAL, -- Need ON sl-ConfigDedicatedNR-r16 OCTET STRING OPTIONAL, -- Need OR sl-SSB-PriorityEUTRA-r16 INTEGER (1..8) OPTIONAL, -- Need OR nonCriticalExtension SEQUENCE {} OPTIONAL}There is no way for the source to include the tdm-PatternConfig2 in other configuration IEs. Therefore, we need to explicitly include the tdm-PatternConfig2 field in the AS-Config as the tdm-PatternConfig field. Regarding Huawei’s comments, the newly imported type cannot be used for the existing field as shown below.AS-Config-v1550 ::= SEQUENCE { tdm-PatternConfig-r15 SEQUENCE { subframeAssignment-r15 SubframeAssignment-r15, harq-Offset-r15 INTEGER (0.. 9) } OPTIONAL, p-MaxEUTRA-r15 P-Max OPTIONAL}TDM-PatternConfig-r15 ::= CHOICE { release NULL, setup SEQUENCE { subframeAssignment-r15 SubframeAssignment-r15, harq-Offset-r15 INTEGER (0..9) }}Hopefully our comments above clarify our intention. We will take companies’ comments into account to update our CR to make the CR clear. |
| CATT |  | Agree with rapporteur |
| Ericsson |  | Ok, so it seems that the purpuse of the new field is to indicate in INM whether the TDM pattern in use is tdm-PatternConfig or tdm-PatternConfig2. This needs to be clarified in both the cover sheet and in the field description to clear the confusion.  |
| Samsung |  | We think target needs to know which field is configured for the UE (i.e. tdm-PatternConfig or tdm-PatternConfig2) to be able to set configuration correctly. For this it seems appropriate to just add the field. Seems good to clarify issue on cover page |

## 2.3 Fast MCG recovery

[R2-2007683](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_111-e/Docs//R2-2007683.zip) Correction on SCG RLF detection while MCG is suspended Huawei, HiSilicon CR Rel-16 38.331 16.1.0 1880 - F LTE\_NR\_DC\_CA\_enh-Core

*Rapporteur comment: The CR may not necessarily be needed, as the UE will anyway trigger the RRC re-establishment, but for clarity it could be good to align with other sections of the spec.*

|  |  |  |
| --- | --- | --- |
| Company | Agree CR?(Yes or No) | Comments |
| ZTE | Yes |  |
| Nokia | Yes | Aligning different sections is desirable as proposed by rapporteur  |
| Huawei | Yes (proponent) |  |
| NEC | Yes |  |
| Qualcomm | Yes | Ok to align with other spec |
| OPPO | Yes  |  |
| Google | Yes |  |
| CATT | Yes | Seems reasonable |
| Ericsson | Yes | Considering it is a smalled clarification, we could consider to add this to the rapporteur CR. |
| MediaTek | Yes | No strong view on whether to put this in rapporteur’s CR. |
| Samsung | Yes |  |

[R2-2007686](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_111-e/Docs//R2-2007686.zip) Miscellaneous corrections for fast MCG link recovery Huawei, HiSilicon CR Rel-16 36.331 16.1.1 4398 - F LTE\_NR\_DC\_CA\_enh-Core

*Rapporteur comment: Not needed. Regarding the three proposed changes:*

*- Fast MCG link recovery is already defined in 37.340, is there really a need to add the reference here?*

*- The check that MCG is not suspended is already performed in 38.331 clause 5.7.3.2, so there is no need to add here.*

*- There is no reason for change for the last change to remove the check for t316 running before triggering MCG failure information.*

|  |  |  |
| --- | --- | --- |
| Company | Agree CR?(Yes or No) | Comments |
| ZTE | Yes for 2nd change; No for 3rd change. | For 1st change, tend to agree with Rapporteur that it seems trivial by only adding a reference here. The 2nd change looks fine to us, although it is mentioned in TS 38.331, maybe it is better to align the wording in TS 36.331. We disagree to the 3rd change. The intention of that sentence is to avoid double triggering.  |
| Nokia | No | Agree with rapporteur comments. Specifically, we think there exists no valid reason for the last change, that could be added to the coversheet. |
| Huawei |  | About rapporteur's comment to 2nd change: with the same argument, one should remove "when NR SCG transmission is not suspended" because the check is also in 5.7.3.2. We should have either the full condition or no condition.About t316: does it mean the UE continues RLM after RLF has occurred? |
| NEC | No | agree with Rapporteur, do not see necessity |
| Qualcomm | No | Agree with rapporteur |
| OPPO | No |  |
| Google | Yes | We are ok with the first two changes.  |
| CATT | No | Agree with rapporteur comments, do not see necessity for the changes |
| Ericsson | No |  |
| MediaTek | No | We are fine with second change but also agree that there is no strong need to have it. |
| Samsung |  | Somewhat agree with rapporteur comments, but 2nd change may be fine to add in a Rap CR |

[R2-2007687](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_111-e/Docs//R2-2007687.zip) Miscellaneous corrections for fast MCG link recovery Huawei, HiSilicon CR Rel-16 38.331 16.1.0 1883 - F LTE\_NR\_DC\_CA\_enh-Core

*Rapporteur comment: Not needed. Regarding the three proposed changes:*

*- Fast MCG link recovery is already defined in 37.340, is there really a need to add the reference here?*

*- The check that MCG is not suspended is already performed in 36.331 clause 5.6.13.2, so there is no need to add here.*

*- The check whether t316 is running may be redundant, but there is no error in the current text.*

|  |  |  |
| --- | --- | --- |
| Company | Agree CR?(Yes or No) | Comments |
| ZTE | Yes for 2nd change; No for 3rd change. | Same comments as above. |
| Nokia | No | Agree with rapporteur comments. |
| Huawei |  | About rapporteur's comment to 2nd change: with the same argument, one should remove "when E-UTRA SCG transmission is not suspended" because the check is also in 5.6.13.2. We should have either the full condition or no condition. |
| NEC | No | same as previous one |
| Qualcomm | No | Agree with rapporteur |
| OPPO | No |  |
| Google | Yes | We are ok with the first two changes.  |
| CATT | No | Same comments as above |
| Ericsson | No |  |
| MediaTek | No | Same comments as above |
| Samsung |  | See previous |

[R2-2007279](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_111-e/Docs//R2-2007279.zip) Correction to field condition of refFR2ServCellAsyncCA Ericsson CR Rel-16 38.331 16.1.0 1823 - F LTE\_NR\_DC\_CA\_enh-Core

*(moved from 6.8.3)*

|  |  |  |
| --- | --- | --- |
| Company | Agree CR?(Yes or No) | Comments |
| ZTE | Yes |  |
| Nokia | Yes |  |
| Huawei | Yes but | We entirely disagree with the problem because "when configuring" does not exclude the case that the gap pattern is already configured, so:- nothing is broken- this CR is totally NBC and there will be problems if implemented by the network and not the UE, while there is no problem if implemented by the UE and not the network (because the network will repeat the field).That said, we think that it is strange that refFR2ServCellAsyncCA-r16 is Need R while refServCellIndicator is need M. Since NBC changes are acceptable now, we agree to make it need M as in the proposed text. But if the intention is "when the gap pattern is not already configured", it should be written.However, we wonder why there is "Otherwise it is absent, need R" but "Otherwise ,it is absent" for refServCellIndicator. Should it not be the same for both?  |
| NEC | Yes but  | one question as from Huawei, why still „Need R“ is kept for *AsyncCA*? |
| Qualcomm | Yes |  |
| OPPO | Yes  |  |
| Google | Yes |  |
| CATT | Yes |  |
| Ericsson | Yes | Regarding the comment on the part with „Otherwise, it is absent, Need R.“, we think need R is still needed in the absent case, otherwise there is no way to release the field. |
| MediaTek | Yes |  |
| Samsung | Yes |  |

[R2-2006780](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_111-e/Docs//R2-2006780.zip) Corrections to failure type for MCGFailureInformation and SCGFailureInformation Samsung Electronics Co., Ltd CR Rel-16 38.331 16.1.0 1737 - F LTE\_NR\_DC\_CA\_enh-Core

*(moved from 6.8.3)*

|  |  |  |
| --- | --- | --- |
| Company | Agree CR?(Yes or No) | Comments |
| ZTE | Yes |  |
| Nokia | Partially Yes | OK, seems in line with current 5.3.10.4 "RLF cause determination" - but for some reason the CR also contains many changes of ";" to "." that seem incorrect. |
| Huawei | Partially yes | Same view like Nokia |
| NEC | Yes | we suggested the same thing, so fine. however, the cause value of “beamFailureRecoveryFailure” was introduced under SON/MDT WI, so good to add the SON/MDT WI code in the cover sheet and keep it separate from other CRs. |
| Qualcomm | Yes | We assume the changes of “;” to “.” are typos. Maybe Samsung can clarify |
| OPPO | Yes  |  |
| Google | Yes |  |
| CATT | Yes | Ok with the changes |
| Ericsson | Yes, partly | Same comment as Nokia.  |
| MediaTek | Yes |  |
| Samsung | Yes | Agree that change from of “;” to “.” are incorrect. In fact, several lines in this section should be changed in the reverse manner |

## 2.4 Other topics

[R2-2007681](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_111-e/Docs//R2-2007681.zip) Correction on storing SCG configuration in UE INACTIVE AS context Huawei, HiSilicon CR Rel-16 38.331 16.1.0 1879 - F LTE\_NR\_DC\_CA\_enh-Core

|  |  |  |
| --- | --- | --- |
| Company | Agree CR?(Yes or No) | Comments |
| ZTE | Yes with changes | Agree the intention, to make it more clear, suggest to modifiy further as below (i.e. see green highlight). 3> store in the UE Inactive AS Context the current KgNB and KRRCint keys, the ROHC state, the stored QoS flow to DRB mapping rules, the C-RNTI used in the source PCell, the *cellIdentity* and the physical cell identity of the source PCell, the *spCellConfigCommon* within *ReconfigurationWithSync* of the NR PSCell (if configured) and all other parameters configured except for the ones within *ReconfigurationWithSync* of the PCell and of the NR PSCell (if configured), and except for the ones ~~or~~ within *MobilityControlInfoSCG* of the E-UTRA PSCell (if configured), and except for *servingCellConfigCommonSIB*; |
| Nokia | Yes |  |
| Huawei | Yes (proponent) | Ok with ZTE's suggestion |
| NEC | Yes | fine with ZTE modifications |
| Qualcomm | Yes | Ok with ZTE suggestion |
| OPPO | Yes  |  |
| Google | Yes |  |
| CATT | Yes | Agree with ZTE suggestion |
| Ericsson | Yes, with changes | We think the text is still rather complex to read. It first describes a list of parameters the UE shall store and then goes on to say that the UE shall store all other parameters configured as well, but then there is a list of exceptions. Would it maybe be clearer if we make a list of the exeptions? E.g. 3> store in the UE Inactive AS Context the current KgNB and KRRCint keys, the ROHC state, the stored QoS flow to DRB mapping rules, the C-RNTI used in the source PCell, the *cellIdentity* and the physical cell identity of the source PCell, the *spCellConfigCommon* within *ReconfigurationWithSync* of the NR PSCell (if configured) and all other parameters configured except for* the ones within *ReconfigurationWithSync* of the Pcell and of the NR PSCell (if configured),
* the ones ~~or~~ within *MobilityControlInfoSCG* of the E-UTRA PSCell (if configured),
* *servingCellConfigCommonSIB*;
 |
| MediaTek | Yes with comment | Agree with the change from Ericsson. The original proposal is very difficult to read. |
| Samsung | Yes | Agree the original text/ proposal is complex and hence prefer the suggestion from Ericsson |

[R2-2006815](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_111-e/Docs//R2-2006815.zip) Clarifications on concept of suspend XCG transmission OPPO discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

*Rapporteur comment: Discussion paper on whether further clarifications of the meaning of suspending MCG/SCG transmissions are needed in the MCG/SCG failure information procedures. RAN2 is requested to discuss whether new sections should be added to RLC and MAC specifications to describe MCG/SCG suspension. The contribution did not make any proposal on what the sections would include. Rapporteur considers such sections are not necessarily needed, as there are no protocol actions on RLC/MAC associated with the suspension of MCG/SCG transmission. But rapporteur is open for suggestions. If something is unclear, it would be good to clarify.*

*The proposals listed in the contribution are listed below for reference:*

**Proposal 1: “suspend MCG transmission……” means only suspend the RLC bearer for all SRBs and DRBs in MCG side.**

**Proposal 2: RAN2 is kindly asked to choose one option to address the confusion issue.**

**Option 1: add a definition in section 3.1 as:**

**MCG transmission:** the RLC bearer of one RB in MCG performs transmission.

**Option 2: capture the below changes in TS 38.331.**

|  |
| --- |
| 5.7.3 SCG failure information5.7.3.2 Initiation==========omit some text========Upon initiating the procedure, the UE shall:1> suspend RLC bearer for all SRBs and DRBs in SCG;1> reset SCG MAC;1. stop T304 for the SCG, if running;

==========omit some text======== |

|  |
| --- |
| 5.7.3b MCG failure information5.7.3b.2 InitiationA UE configured with split SRB1 or SRB3 initiates the procedure to report MCG failures when neither MCG nor SCG transmission is suspended, *t316* is configured, and when the following condition is met:1> upon detecting radio link failure of the MCG, in accordance with 5.3.10.3, while T316 is not running.Upon initiating the procedure, the UE shall:1> stop timer T310 for the PCell, if running;1> stop timer T312 for the PCell, if running;1> suspend RLC bearer for all SRBs and DRBs in MCG, except SRB0; 1> reset MCG MAC;==========omit some text======== |

**Proposal 3: RAN2 is kindly asked to discuss whether a new section is needed in TS38.322/321 to captured behaviour description for RLC suspend, and/or MAC suspend.**

|  |  |
| --- | --- |
| Company | Comments |
| ZTE | Seems nothing is broken. Perfer not to over-specify it. In addition, shouldn’t “suspend MCG transmission” also covers “stopping SR/SRS…. transmission in MCG”? |
| Nokia | We note that already at Initiation of LTE RRC Re-establishment, UE shall "suspend all RBs", without any further clarifications in other specs.Proposal 1: We agree.Proposal 2: Given our note above, we are not sure anything is needed, but of the provided Options 1 and 2 we prefer the latter.P3 Given our note above, we are doubtful that anything would be needed in RLC/MAC specs. |
| Huawei | MCG is the CellGroupConfig with cell GroupId 0, so it seems rather clear actually. |
| NEC | agree with meaning of “suspend …” but nothing is really needed.. |
| Qualcomm | We also think nothing is broken. And we think what is "MCG transmission" seems to be common understanding in RAN2. |
| OPPO(proponent) | When UE enter RRC\_INACTIVE state, the UE will suspend all the SRB, DRB except SRB0. In this case, the RRC will know the suspension first and indicates PDCP and upper layer (NAS) to suspend. In PDCP spec, there is a section, i.e. 5.3.8.3, to describe “PDCP entity suspend”. For RLC, MAC and PHY, there is **NO** corresponding section to describe the suspend behaviour.

|  |
| --- |
| 5.3.8.3 Reception of the *RRCRelease* by the UEThe UE shall:==========omit some text========1> if the *RRCRelease* includes *suspendConfig*:2> apply the received *suspendConfig*;==========omit some text========2> suspend all SRB(s) and DRB(s), except SRB0;2> indicate PDCP suspend to lower layers of all DRBs;==========omit some text========2> indicate the suspension of the RRC connection to upper layers;2> enter RRC\_INACTIVE and perform cell selection as specified in TS 38.304 [20]; |

For SCG failure case, it only says “suspend SCG transmission for all SRBs and DRBs”.For MCG failure case, it says “suspend MCG transmission for all SRBs and DRBs, except SRB0”.However, it is not clear what is that mean “suspend MCG/SCG transmission…..” and there is no corresponding definition on it. We believe that suspend RB is different from suspend MCG/SCG transmission of one RB. But there is detail text to explain it. Because it is not clear if the PDCP is also suspend for the RB id MCG/SCG is suspended.If proposal 1 is common understanding, we suggested at least capture the wording in the chairman notes. If we would like to capture something, we propose option 2 in proposal 2. |
| Google | Agree with the clarification on the suspending MCG transmission but not sure if we need to clarify it in the specifications. |
| CATT | Agree with the Proposal1. For Proposal2, we prefer the option2. |
| Ericsson | We don’t think this needs to be clarified in the specification |
| MediaTek | We disagree on the change. The original text on “suspend MCG transmission” or “suspend SCG transmission” is clear enough to us. We see no room for misunderstanding. |
| Samsung | This was inherited from LTE so we are not sure there is a need for any clarification |

## 2.5 Leftovers from Aug 19 session

[R2-2008366](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_111-e/Docs//R2-2008366.zip)    Corrections on Unaligned CA        CMCC   CR        Rel-16   38.331  16.1.0   1990     -           B          TEI16

*(moved from 6.14.2)*

|  |  |  |
| --- | --- | --- |
| Company | Agree CR?(Yes or No) | Comments |
| Ericsson | Yes | Yes, for DL, *scs-SpecificCarrierList* is included in *FrequencyInfoDL*, which is included in *DownlinkConfigCommon*, which is included in *ServingCellConfigCommon*. So it would be good to correct, but suggest to add this clarification to rapporteur CR. |
| MediaTek | Yes | It would also be fine to put this in rapporteur CR. |
| ZTE | Yes |  |
| Nokia | Yes |  |
| Qualcomm  | Yes |  |
| Samsung | Yes | Rap CR seems fine |

Use of SK-counter in Rel-16:

[R2-2006814](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_111-e/Docs//R2-2006814.zip)    Correction on sk-Counter-R16       OPPO   CR        Rel-16   38.331  16.1.0   1739     -           F   LTE\_NR\_DC\_CA\_enh-Core

|  |  |  |
| --- | --- | --- |
| Company | Agree CR?(Yes or No) | Comments |
| Ericsson | No | The field description for *mrdc-SecondaryCellGroup* in *RRCResume* already describes which fields that are allowed if *RRCReconfiguration* is carried in mrdc-SecondaryCellGroup. SK-counter is not listed, thus it cannot be included.POOP🡺@Ericsson: only the second change is proposed here. |
| MediaTek | No | Same view as EricssonPOOP🡺@MTK: only the second change is proposed here. |
| OPPO | Yes  | In R15 RRCResume message, the *sk-Counter* can be configured for the RB with *keyToUse* set to *secondary.*

|  |
| --- |
| RRCResume-v1560-IEs ::= SEQUENCE { radioBearerConfig2 OCTET STRING (CONTAINING RadioBearerConfig) OPTIONAL, -- Need M sk-Counter SK-Counter OPTIONAL, -- Need N nonCriticalExtension RRCResume-v1610-IEs OPTIONAL} |

***sk-Counter***A counter used to derive S-KgNB or S-KeNB based on the newly derived KgNB during RRC Resume. The field is only included when there is one or more RB with *keyToUse* set to *secondary*.In R16, SCG can be resumed or configured in RRCResume message with *mrdc-SecondaryCellGroup* IE configured.

|  |
| --- |
| RRCResume-v1610-IEs ::= SEQUENCE { idleModeMeasurementReq-r16 ENUMERATED {true} OPTIONAL, -- Need N restoreMCG-SCells-r16 ENUMERATED {true} OPTIONAL, -- Need N restoreSCG-r16 ENUMERATED {true} OPTIONAL, -- Need N mrdc-SecondaryCellGroup-r16 CHOICE { nr-SCG-r16 OCTET STRING (CONTAINING RRCReconfiguration), eutra-SCG-r16 OCTET STRING } OPTIONAL, -- Cond RestoreSCG needForGapsConfigNR-r16 SetupRelease {NeedForGapsConfigNR-r16} OPTIONAL, -- Need M nonCriticalExtension SEQUENCE{} OPTIONAL} |

In this case, if no SCG terminated bearer is setup, then *sk-Counter* will not be configured in RRCResume according to the field description of *sk-Counter* in RRCResume message.In RAN2#100 meeting, RAN2 agreed the MN should always provide the *sk-Counter* to the UE in order to enable SRB3 to be setup based on SN decision. So the filed description should consider the SCG configuration in RRCResume message case. It also aligns with the field description of *sk-Counter* in RRCReconfiguration message.Agreement:1 The MN should always provide SK counter to the UE and SKgNB and security capability to SN at SN addition (even if no SCG anchored bearers are setup) in order to enable SRB3 to be setup based on SN decision.=================begin of text proposal 1 in TS 38.331 for RRCResume message=============

|  |
| --- |
| ***restoreSCG***Indicates that the UE shall restore the SCG configurations from the UE Inactive AS Context, if stored. |
| ***sk-Counter***A counter used to derive S-KgNB or S-KeNB based on the newly derived KgNB during RRC Resume. The field is only included when there is one or more RB with *keyToUse* set to *secondary* or NR SCG is configured.  |

=======================end of text proposal 1 in TS 38.331======================== |
| ZTE | Yes to 2nd change | For the first change (modify the field desription in RRCReconfiguration), we agree it is not needed as commented by Ericsson. For the second change (modify the field description in RRCResume), we think it is good to have. Otherwise, seems nowhere the agreement is captured.  |
| Nokia | 2nd change OK |  |
| Samsung | No | Agree this is already clear as indicated by Ericsson |

DCCA-specific UE capability aspects:

[R2-2006562](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_111-e/Docs//R2-2006562.zip)    CR to 36.306 on UE capability of direct SCell activation      Qualcomm Incorporated CR        Rel-16   36.306  16.1.0   1776     -           F          LTE\_NR\_DC\_CA\_enh-Core

*(moved from 6.8.3.1)*

|  |  |  |
| --- | --- | --- |
| Company | Agree CR?(Yes or No) | Comments |
| Ericsson | Not sure | We are not sure this is needed as the current directSCellActivation-r15 could cover also the case of SCG SCell in NE-DC. It is not limited to MCG according to current description.  |
| MediaTek | Yes with comment  | The *directSCellActivation-r15* is introduced in LTE euCA WI while the NE-DC architecture is introduced with NR new RAT. We don’t think the original intention of *directSCellActivation-r15* already cover E-UTRA SCG SCell. Therefore it would reasonable to have separate capability for this. This has been discussed during the introduction of R16 DCCA capability but it is left as it is since it also related to R15. With that, we think that if we want to have this capability, it is better to started with R15. Therefore, we would suggest move this discussion to R15 AI or R16 general AI if companies willing to continues the discussion.  |
| ZTE | Not sure | We also think directSCellActivation-r15 can be used to cover both MCG SCell and SCG SCell. But if majority companies think a separate bit is needed, we would be fine with it.  |
| Nokia |  | Why wouldn’t r15 capability cover both MCG and SCG SCell? But anyway if majority see a need it is fine. Then Based on draft CR it seem LTE DC SCG is nto covered at all, is this intention? |
| Qualcomm | Yes | The intention is what MediaTek indicated: *directSCellActivation-r15* was introduced in LTE euCA WI while the NE-DC architecture is introduced with NR new RAT. We don’t think the original intention of *directSCellActivation-r15* already cover E-UTRA SCG SCell.With above clarification on intention, we think at least some clarifications are needed whether directSCellActivation-r15 can cover both MCG and SCG SCell. Our preference is to have a new capability to cover NE-DC case which is supported in Rel-17. However, for progress, if majority prefer not to introduce a new capability. It is acceptable for us considering NE-DC is not a popular MR-DC architecture. But if in that way, we do think the clarification is needed in spec that the old *directSCellActivation-r15* covers both MCG and SCG SCell. For Nokia comments, it is not our intention to preclude LTE-DC. That is because we didn’t consider LTE-DC case which is not deployed anyway, when drafting the CR. We can update CR to include LTE-DC case if the new capability for NE-DC is agreed.  |
| Samsung | Yes | We think it is preferable to have a separate capability |

[R2-2006563](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2//TSGR2_111-e/Docs//R2-2006563.zip)    CR to 36.331 on UE capability of direct SCell activation      Qualcomm Incorporated CR        Rel-16   36.331  16.1.1   4348     -           F          LTE\_NR\_DC\_CA\_enh-Core

*(moved from 6.8.3.1)*

|  |  |  |
| --- | --- | --- |
| Company | Agree CR?(Yes or No) | Comments |
| Ericsson | Not sure | We are not sure this is needed as the current directSCellActivation-r15 could cover also the case of SCG SCell in NE-DC. It is not limited to MCG according to current description. |
| MediaTek | Yes with comment | Same comment as previous question. |
| ZTE | Not sure | Same comment as previous question. |
| Nokia | Not sure |  see above comment |
| Qualcomm | Yes | Same comment as pervious question |
| Samsung | Yes | See previous |

# Conclusion

# References

[1]