**3GPP TSG-RAN WG2 Meeting #123 R2-23xxxx**

**Toulouse, France, August 21 – 25, 2023**

Agenda Item: 7.4.2.3

Source: CATT

**Title:** Report of [Post122][057][Mob18] 38.331 Running CR for CHO with candidate SCGs (CATT)

Document for: Discussion and Decision

# Introduction

This document is the report of the following email discussion.

* [Post122][057][Mob18] 38.331 Running CR for CHO including target MCG and candidate SCGs (CATT)

 Scope: Reflect agreements, attempt to converge on a 1st baseline CR. Capture identified open issues (e.g. in Editors Notes).

 Intended Outcome: Running CR, Report if applicable.

 Deadline: Long

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# Open issues

In the phase 1 of RRC Running CR for CHO with candidate SCGs [1], Remaining issues are identified and captured in Editor’s note. This document is to collect companies’ view on the open issues.

Following are the open issues captured in EN in the RRC Running CR for CHO with candidate SCGs [1].

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| **Issue** | **Description** | **Relevant section in TS 38.331** |
| #1 | Editor’s note: FFS how to indicate the selected target SCG to the target MN (i.e. whether to reuse *selectedCondRRCReconfig-r17* or not), so that target MCG can forward the corresponding SCG RRCReconfigurationComplete message to the selected target SCG. | 5.3.5.3 |
| #2 | Editor’s note: FFS whether UE should remove the configuration for CHO including target MCG and candidate SCG configuration when SCG is to be released.  | 5.3.5.4 |
| #3 | Editor’s note: FFS whether the legacy CHO recovery mechanism applies to the configuration for CHO with candidate SCG(s). | 5.3.7.3 |
| #4 | Editor’s Note: FFS whether to stop conditional reconfiguration evaluation for CHO with Candidate SCG(s) upon initiating SCG failure information procedure. | 5.7.3.2 |
| #5 | Editor’s note: FFS whether to extend *maxNrofCondCells-r16* for CHO with candidate SCG(s). | 6.3.2*CondReconfigId* |
| #6 | Editor’s note: FFS how to ensure the total number of the candidate PCells and the candidate PSCells from each candidate MN and the candidate SN is within the maximum limation. | 6.3.2*CondReconfigId* |
| #7 | Editor’s note: FFS whether to support condEventA3 or condEventA5 for the execution conditions for candidate PSCells for CHO with candidate SCG(s). | 6.3.2*CondReconfigToAddModList* |
| #8 | Editor’s note: FFS which node (source MN or candidate MN) to initiate the preparation of the R18 CHO with candidate SCG(s). | 11.2.2*HandoverPreparationInformation* |
| #9 | Editor’s note: FFS which node (source MN or candidate MN) to recommend the candidate PSCells. | 11.2.2*HandoverPreparationInformation* |
| #10 | FFS whether to support recommendation of the candidate PSCells based on measurement results. | 11.2.2*CG-ConfigInfo* |
| #11 |  *Editor’s note: FFS if to stop evaluating the execution conditions once PSCell change is triggered.* | 37.340 CR,10.19.x |

## Issue#1

Editor’s note: FFS how to indicate the selected target SCG to the target MN (i.e. whether to reuse *selectedCondRRCReconfig-r17* or not), so that target MCG can forward the corresponding SCG RRCReconfigurationComplete message to the selected target SCG.

In rapporteur’s understanding, *CondReconfigId* which is referred by *selectedCondRRCReconfig-r17* is generated by source MN and target MN is not aware of it. It seems *selectedCondRRCReconfig-r17* cannot be reused.

**Question 1a: Do you agree that selectedCondRRCReconfig-r17 cannot be reused to indicate the selected target SCG to the target MN?**

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| **Company** | **Yes or No** | **Comments if any** |
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If selectedCondRRCReconfig-r17 is not used, the potential options to indicate the selected PSCell to target MN are as following,

Option 1: rrc-TransactionIdentifier

Option 2: cell information (e.g., physCellId,ARFCN-ValueNR) of the selected PSCell

**Question 1b: If your answer to Q1a is Yes, which option do you prefer to use?**

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| **Company** | **Option(option1,option 2)** | **Comments if any** |
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## Issue#2

Editor’s note: FFS whether UE should remove the configuration for CHO including target MCG and candidate SCG configuration when SCG is to be released.

In rapporteur’s understanding, UE does not need to remove it. NW can indicate UE to release the configuration if NW thinks the configuration is not useful after SCG release.

**Question 2: Do you agree that UE does not remove the configuration for CHO including target MCG and candidate SCG configuration automatically when SCG is to be released?**

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| **Company** | **Yes or No** | **Comments if any** |
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## Issue#3

Editor’s note: FFS whether the legacy CHO recovery mechanism applies to the configuration for CHO with candidate SCG(s).

In rapporteur’s understanding, it seems reasonable to apply CHO recovery to CHO with candidate SCGs and it does not bring too much spec impact.

**Question 3: Do you agree that the legacy CHO recovery mechanism applies to the configuration for CHO with candidate SCG(s)?**

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| **Company** | **Yes or No** | **Comments if any** |
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## Issue#4

Editor’s Note: FFS whether to stop conditional reconfiguration evaluation for CHO with Candidate SCG(s) upon initiating SCG failure information procedure.

In rapporteur’s understanding, it seems not necessary to stop conditional reconfiguration evaluation for CHO with Candidate SCG(s) upon initiating SCG failure information procedure.

**Question 4: Do you agree to continue conditional reconfiguration evaluation for CHO with Candidate SCG(s) upon initiating SCG failure information procedure?**

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| **Company** | **Yes or No** | **Comments if any** |
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## Issue#5

Editor’s note: FFS whether to extend *maxNrofCondCells-r16* for CHO with candidate SCG(s).

In rapporteur’s understanding, it seems there is no strong need to extend *maxNrofCondCells-r16* for CHO with candidate SCG(s).

**Question 5: Do you agree to reuse maxNrofCondCells-r16 for CHO with candidate SCG(s)?**

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| **Company** | **Yes or No** | **Comments if any** |
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## Issue#6

Editor’s note: FFS how to ensure the total number of the candidate PCells and the candidate PSCells from each candidate MN and the candidate SN is within the maximum limitation.

In rapporteur’s understanding, to ensure the total number of the candidate PCells and the candidate PSCells from each candidate MN and the candidate SN is within the maximum limitation, source MN should tell each candidate MN a maximum number of the candidate PSCells associated with the candidate PCell.

**Question 6: Do you agree that** **source MN should tell each candidate MN a maximum number of the candidate PSCells** **associated with the candidate PCell?**

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| **Company** | **Yes or No** | **Comments if any** |
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## Issue#7

Editor’s note: FFS whether to support condEventA3 or condEventA5 for the execution conditions for candidate PSCells for CHO with candidate SCG(s).

In rapporteur’s understanding, the intention of the CHO with candidate SCGs is to ensure the accessed PSCell is accessible when perform CHO execution, thus the aim is to ensure the channel quality of the PSCell is good enough to access, so the agreed condEventA4 is sufficient.it is not necessary to support condEventA3 or condEventA5 for the execution conditions for candidate PSCells for CHO with candidate SCG(s).

**Question 7: Do you agree to not support condEventA3 or condEventA5 for the execution conditions for candidate PSCells for CHO with candidate SCG(s)?**

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| **Company** | **Yes or No** | **Comments if any** |
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## Issue#8

Editor’s note: FFS which node (source MN or candidate MN) to initiate the preparation of the R18 CHO with candidate SCG(s).

In rapporteur’s understanding, it seems straightforward for the source MN to initiate the preparation of the R18 CHO with candidate SCG(s) as the configuration including the execution condition is configured for UE by source MN.

**Question 8: Do you agree that source MN initiates the preparation of the R18 CHO with candidate SCG(s)?**

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| **Company** | **Yes or No** | **Comments if any** |
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## Issue#9

Editor’s note: FFS which node (source MN or candidate MN) to recommend the candidate PSCells.

In rapporteur’s understanding, the interface between candidate MN and candidate SN is transparent to the source MN, thus it seems more proper for the candidate MN to decide the candidate SN and recommend the candidate PSCells list to the candidate SN.

**Question 9: Do you agree that candidate MN recommends the candidate PSCells to candidate SN?**

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| **Company** | **Yes or No** | **Comments if any** |
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## Issue#10

Editor’s note: FFS whether to support recommendation of the candidate PSCells based on measurement results.

In legacy, recommendation of the candidate PSCells is based on measurement results. In case of MN initiated CPA or CPC, the field *candidateCellInfoListMN* in the Inter-node message *CG-ConfigInfo* contains measurement results information(i.e., *MeasResultList2NR*) regarding cells that the MN suggests the candidate target secondary node to consider configuring for MN initiated CPA or CPC.

**Question 10: Do you agree that recommendation of the candidate PSCells is based on measurement results?**

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| **Company** | **Yes or No** | **Comments if any** |
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## Issue#11

*Editor’s note: FFS if to stop evaluating the execution conditions once PSCell change is triggered.*

The R16/R17 CHO evaluation shall be stopped once PCell change is triggered, but not for PSCell change. Currently, it’s unclear whether PSCell change shall stop the R18 CHO with candidate SCGs evaluation (including evaluation on both PCell and PSCell).

**Question 11: Do you agree that the evaluation of the execution conditions is stopped once PSCell change is triggered?**

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| **Company** | **Yes or No** | **Comments if any** |
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# Reference

[1] R2-230xxxx RRC Running CR for CHO including target MCG and candidate SCGs