3GPP TSG-RAN WG2 Meeting #110 R2-200xxxx

Electronic, 01 June - 12 June, 2020

Agenda item: 5.4.3.1

Source: Apple

Title: Summary of email discussion [AT110-e][015][NR15] UE cap FR2 Fallback (Apple)

Document for: Discussion

# 1 Introduction

This is to summarize the following offline email discussion.

* [AT110-e][015][NR15] UE cap FR2 Fallback (Apple)

Scope: Progress CRs, based on R2-2004754 and R2-2004754

Part 1: Can kick off email discussion to gather more comments on the CRs, awaiting on-line treatment.

Part 2: Technically Endorsed CRs for RP. Deadline: June 10, 0700 UTC

# 2 Discussion

From the summary on email discussion [Post109bis-e][921][NR15] CRs for FR2 CA Fallback (Apple), rapporteur list several open issues to gather more comments on the CRs (R2-2004754, R2-2004755).

**Issue 1:** For inter-node signaling (CG-Config, CG-ConfigInfo), current design from R2-2004754 is to keep one *bandCombinationIndex*, which follows the design made for *supportedBandCombinationListNEDC-Only*. We received some offline comments proposing whether to introduce a separate *bandCombinationIndex* for supportedbandcombinations in *rf-Parameters-FR2-CA-Fallback* and *rf-ParametersMRDC-FR2-CA-Fallback*, in order to make sure it's clear which band combination list each index the MN indicates refers to.

Q1: Do companies think the current change shown below to *bandCombinationIndex* is sufficient and clear enough?

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| ***BandCombinationInfoSN* field descriptions** |
| ***bandCombinationIndex***  In case of (NG)EN-DC and NR-DC, this field indicates the position of a band combination in the *supportedBandCombinationList*. In case of NE-DC, this field indicates the position of a band combination in the *supportedBandCombinationList* and/or *supportedBandCombinationListNEDC-Only*. Band combination entries in *supportedBandCombinationList* are referred by an index which corresponds to the position of a band combination in the *supportedBandCombinationList*. Band combination entries in *supportedBandCombinationListNEDC-Only* are referred by an index which corresponds to the position of a band combination in the *supportedBandCombinationListNEDC-Only* increased by the number of entries in *supportedBandCombinationList*.  In case *rf-Parameters-FR2-CA-Fallback* and/or *rf-ParametersMRDC-FR2-CA-Fallback* exist, band combination entries in *rf-Parameters-FR2-CA-Fallback* and/or *rf-ParametersMRDC-FR2-CA-Fallback* are referred by an index which corresponds to the position of a band combination in the *rf-Parameters-FR2-CA-Fallback* and/or *rf-ParametersMRDC-FR2-CA-Fallback* increased by the number of band combination entries in *rf-Parameters* and/or *rf-ParametersMRDC*. |

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| Companies | Answer (Yes/No) | Comments |
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**Issue 2:** One comment received during email discussion [Post109bis-e][921][NR15] CRs for FR2 CA Fallback (Apple) was not captured into the draft CR submitted in R2-2004754 and R2-2004755. The proposed change is to add the highlighted text “in a cell group”. The purpose is to clarify that “UE can only fallback to one single carrier on FR2” means for intra-band FR2 SCG, UE only fallbacks to one single carrier. But the MCG part is not impacted. Otherwise, UE is not able to support DC anymore. Rapporter thinks this is a straightforward clarification.

Q2: Do companies agree with the additional text “in the cell group” (highlighted in yellow) in the field descriptions?

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| ***UE-MRDC-Capability* field descriptions** |
| ***featureSetCombinations***  A list of *FeatureSetCombination*:s for *supportedBandCombinationList* and *supportedBandCombinationListNEDC-Only* in *UE-MRDC-Capability*. The *FeatureSetDownlink*:s and *FeatureSetUplink*:s referred to from these *FeatureSetCombination*:s are defined in the *featureSets* list in *UE-NR-Capability*. |
| ***rf-ParametersMRDC-FR2-CA-Fallback***  A list of band combinations that the UE supports for MR-DC with FR2 intra-band non-contiguous CA, on which the UE only supports fallback band combinations resulting in a single FR2 carrier in the cell group. The band combinations that are allowed to be reported in this list are defined in [34] and [39]. The *FeatureSetCombinationId*:s in this list refer to the *FeatureSetCombination* entries in the *featureSetCombinations* list in the *UE-MRDC-Capability* IE. |

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| ***UE-NR-Capability* field descriptions** |
| ***featureSetCombinations***  A list of *FeatureSetCombination:s* for *supportedBandCombinationList* in *UE-NR-Capability*. The *FeatureSetDownlink:s* and *FeatureSetUplink:s* referred to from these *FeatureSetCombination:s* are defined in the *featureSets* list in *UE-NR-Capability*. |
| ***rssi-CO-Measurements***  Indicates whether the UE supports performing RSSI and Channel Occupancy (CO) measurements for operation with shared spectrum channel access. |
| ***rf-Parameters-FR2-CA-Fallback***  A list of band combinations that the UE supports for NR (and NR-DC, if requested) with FR2 intra-band non-contiguous CA, on which the UE only supports fallback band combinations resulting in a singler FR2 carrier in a cell group. The band combinations that are allowed to be reported in this list are defined in [39]. The *FeatureSetCombinationId*:s in this list refer to the *FeatureSetCombination* entries in the *featureSetCombinations* list in the *UE-NR-Capability* IE. |

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| Companies | Answer (Yes/No) | Comments |
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Q3: If companies have other comments on the CR set, please bring them here.

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| Companies | Comments |
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# 3 Conclusions

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