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

Electronic Meeting, April 20th – 30th 2020

Agenda Item: 5.4.3

Source: OPPO

Title: [AT109bis-e][016][NR15] UE Cap Miscellaneous III (Oppo, ZTE, Nokia, Huawei)

Document for: Discussion, Decision

# 1 Introduction

This document is to kick off the following email discussion:

* [AT109bis-e][016][NR15] UE Cap Miscellaneous III (Oppo, ZTE, Nokia, Huawei)

Scope: Treat R2-2002694, R2-2002695, R2-2002637, R2-2002636, R2-2002989, R2-2002678, R2-2003541, R2-2003542

Part 1: Determine which issues that need resolution, find agreeable proposals. Deadline: April 23 0700 UTC

Part 2: For the parts that are agreeable, discussion will continue to agree on CRs.

# 2 Discussion

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

### 2.1 Clarification on *BandParameters* (*R2-2002694, R2-2002695, R2-2002637, R2-2002636*)

In the related contributions, the proposal is to add a field description in Rel-15 to clarify the relationship between the original *bandList* and *bandList*-v1540, and further extend it to *bandList*-v16xy.

Although two options are provided in R2-2002694,

* CRs are prepared based on option-1 (proposed as baseline in 2694), i.e., the UE shall include the same number of entries, and listed in the same order in different versions of *bandList*.
* In option-2, the CR only mandates the same order but not the same number of entries.

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| Company | Agree/Disagree | Comments |
| OPPO | Agree | Apparently the  |

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| Nokia | Not yet… | * For R2-2002694, R2-2002695 have we misunderstood something? In our understanding, the SRS params are not needed to be filled in for all the band combinations so the presence will take care.
* For R2-2002637, R2-2002636 this should be common sense based on how the lists are formatted and there should be no misunderstanding?
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| NTT DOCOMO | CR is not necessary | Option 1 is our understanding given the structure that frequency band information is included only in the original field ,i.e. BandParameters (w/o suffix). Nevertheless, it is obvious from the signaling structure. Moreover, it is the same as in LTE. For LTE, such a clarification was not needed. We haven’t heard any IOT problems since LTE CA is deployed in the network. We’re not sure if it is motivated by the real IOT problem. |
| CATT | No need | Implementation exists today and we do not see a risk without these changes. And if we do this, it seems many other IEs under the band parameter will also need to be clarified? |
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### 2.2 Removing bandwidth class F ([*R2-2002989*](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_109bis-e/Docs/R2-2002682))

RAN4 dummy bandwidth class F so that the CR is to remove that by clarification in 38.306.

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| Company | Agree/Disagree | Comments |
| NTT DOCOMO | Agree |  |
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### 2.3 Clarify the *bwp-WithoutRestriction* ([*R2-2002678*](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_109bis-e/Docs/R2-2002682))

In the description for IE of *bwp-WithoutRestriction* , the sentence of “The Bandwidth restriction in terms of DL BWP for PCell and PSCell means that the bandwidth of a UE-specific RRC configured DL BWP may not include the bandwidth of CORESET #0 (if configured) and SSB.” Is misleading, since it should be for “BWP operation without bandwidth restriction”.

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| Company | Agree/Disagree | Comments |
| Nokia | Disagree | Is there really any way to misinterpret this? If this is really an issue we can agree to fix that as part of rapporteur CR. |
| NTT DOCOMO | Disagree | Not essential. It is less likely to misinterpret as such. |
| CATT |  | This seems editorial. Not sure if this is needed in this stage. Or maybe as Nokia said it can be handled in rapporteur CR. |
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### 2.4 Clarify the *bwp-SwitchingDelay* ([*R2-2003541,*](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_109bis-e/Docs/R2-2002682) *R2-2003542*)

In the description of the field *bwp-SwitchingDelay*, it says “Defines whether the UE supports DCI and timer-based active BWP switching delay type1 or type2 specified in clause 8.6.2 of TS 38.133 [5]. It is mandatory to report type 1 or type 2”. It mandates a UE to report the support of type1 or type2 for BWP switching delay. The proposal is to add “if the UE reports bwp-DiffNumerology, bwp-SameNumerology or bwp-WithoutRestriction.” to avoid the case of basic BWP operation.

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| Company | Agree/Disagree | Comments |
| Nokia | Strictly disagree | Agreeing to this change will make a mandatory Rel-15 feature optional. The BWP DCI switching was supposed to be mandatory with capability, but now the proposal is to make it mandatory if UE supports the 6-3/6-4/6-1a, which was never the intent of this capability. |
| NTT DOCOMO | Agree | According to TR 38.822 (RAN1 UE feature list), DCI based switching is a component of bwp-SameNumerology and bwp-DiffNumerology, which are optional. In other words, it could be understood as conditional mandatory if UE supports bwp-SameNumerology or bwp-DiffNumerology. |
| CATT | Agree | We understand the signaling the same way as the two document and we tend to think the proposed changes make things more clear.  |
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# Conclusion

In the previous sections we made the following observations:

Based on the discussion in the previous sections we propose the following:

# References

[1]