3GPP TSG-RAN WG2 Meeting #109-e R2-2002148

24th February – 6th March 2020

Agenda: 5.4.3

Source: Huawei

Title: [AT109e][010][NR15] Potential easies IV (Huawei)

Document for: Discussion and Decision

# 1 Introduction

This document contains a list of documents to be discussed for the email discussion below. Companies are invited to give the comments on the CRs.

* [AT109e][010][NR15] Potential easies IV (Huawei)

Scope: Treat the documents [R2-2001187](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_109_e\Docs\R2-2001187.zip), R2-2001323, R2-2001314, R2-2001314, R2-2001313, R2-2001312

Intended outcome: Agreed CRs

Deadline: Feb 27 1200 CET

# 2 Discussion

Companies are invited to give the comments on the CRs.

## R2-2001312, R2-2001313, R2-2001314

70 MHz BW – email discussion

R2-2001312 Report for email discussion 108#04 on support of 70MHz CBW Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

R2-2001313 CR to 38.331 on support of 70MHz channel bandwidth Huawei, HiSilicon, Vodafone CR Rel-15 38.331 15.8.0 1410 2 F NR\_newRAT-Core R2-1916500

R2-2001314 CR to 38.306 on support of 70MHz channel bandwidth Huawei, HiSilicon, Vodafone CR Rel-15 38.306 15.8.0 0209 2 F NR\_newRAT-Core R2-1916501

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| --- | --- |
| **Company** | **Comments on the CR** |
| Intel | Support the CRs |
| Qualcomm Incorporated | Support the CRs |
| Nokia | * For 38.306 the description could be improved: What does this mean “all the bits in channelBWs-DL-v15xy without associated bandwidths as defined in clause 5.3.5 of TS 38.101-1 [2] and TS 38.101-2 [3] shall be set to 0.“? We understood the intent was to leave the rest of the bits undefined for now, and would simply rephrase and say that as follows: “For FR1, the leading/leftmost bit in channelBWs-DL-v15xy indicates 70MHz, and all the remaining bits in channelBWs-DL-v15xy shall be set to 0 in this version of the specification. For FR2, all the bits bits in channelBWs-DL-v15xy shall be set to 0 in this version of the specification.“ This more clearly indicates that for FR1, the leading bit has a meaning but no other bits do (in this version of specification), and for FR2 none of the bits have a meaning yet (in this version of specification). * For TS 38.331, the inter-operability analysis is missing: If UE implements the CR but network doesn’t, there are no inter-operability issues as network will just ignore the new bits. If NW implements the CR but UE doesn’t, there are no inter-operability issues as UE will never indicate the new bits.   For TS 38.331 and TS 38.306 this would be good to add, Consequences if not approved could be improved, e.g. “UE cannot indicate support for 70 MHz channel bandwidth.“ |
| NTT DOCOMO | It is O.K how to extend the signalling to accmmodate additional channel BW. On the field description in 38.306, we prefer Nokia’s suggestion. |
| Apple | Support the CRs |
| Ericsson | We also support the CRs with the Nokia wording, acknowledging we could introduce signalling for new BWs at any point in time (on request by RAN4...)  We should also also add „without siffix“ like this (the „Absence...“ text is only applicable to the original field). The -v1530 was deleted in 38331 Rapporteur CR, and does not exist in 38331 vf80.  ***channelBWs-UL***  Indicates for each subcarrier spacing the UE supported channel bandwidths.  Absence of the *channelBWs-UL* (without suffix)for a band or absence of specific scs-XXkHz entry for a supported subcarrier spacing means that the UE supports the channel bandwidths among [5, 10, 15, 20, 25, 30, 40, 50, 60, 80, 100] and [50, 100, 200] that were defined in clause 5.3.5 of TS 38.101-1 version 15.7.0 [2] and TS 38.101-2 version 15.7.0 [3] for the given band or the specific SCS entry.  For FR1, the bits in *channelBWs-UL* (without suffix) starting from the leading / leftmost bit indicate 5, 10, 15, 20, 25, 30, 40, 50, 60 and 80MHz. For FR2, the bits in *channelBWs-UL* (without suffix) starting from the leading / leftmost bit indicate 50, 100 and 200MHz. The third / rightmost bit (for 200MHz) shall be set to 1.  <cut> |
| Samsung | Support the CRs which reflecting Nokia’s comment. |
| MediaTek | Support the latest version of the CRs. |
| ZTE | Support the latest version of the CRs. |
|  |  |

Summary:

9 companies participate in this offline.

The intention of CRs is agreeable but 4 companies think the wording needs update. The updated CRs are R2-2002152 and R2-2002153 with incorporating the comments from Nokia, DOCOMO and Ericsson. Considering the majority’s view, rapporteur suggests agreeing the CRs R2-2002152 and R2-2002153.

Proposal 1: RAN2 to agree the CRs R2-2002152 and R2-2002153.

## R2-2001323

R2-2001323 CR on maximum stored number of deprioritisation frequencies Huawei, HiSilicon CR Rel-15 38.306 15.8.0 0254 - F NR\_newRAT-Core

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| **Company** | **Comments on the CR** |
| Intel | We agree with the intention and it seems OK to capture it in that table. |
| Qualcomm Incorporated | Support the CR. |
| Nokia | We agree with the intention, but since this is implicitly captured already by RRC signalling, is there a benefit from capturing it in UE requirements? i.e. normally in absence of capabilities, UE is required to comprehend and store the entirety of ASN.1 configuration. |
| NTT DOCOMO | The intention is agreeable. The proposed description could be polished to explain what „deprioritisation frequencies“ mean. I‘d like to suggest to reuse the sentence present in v15.3.0 of 38.331, which was removed by the relevant CR, R2-1818689 below with some modifications adding the message name.  The UE shall be able to store a deprioritisation request for up to 8 frequencies (applicable when receiving another frequency specific deprioritisation request via *RRCRelease* before T325 expiry). |
| Apple | Support the CR. |
| Ericsson | Ok. |
| Samsung | Support but it seems quite minor so separate CR does not really seem justified. |
| MediaTek | Support the CR. We also suggest following change, since not all capability in the table are minimum.  8 UE Capability Constraints  The following table lists constraints indicating the ~~minimum~~ UE capabilities that the UE shall support. |
| ZTE | Support the CR. |
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Summary:

9 companies participate in this offline.

The intention of CRs is agreeable but 3 companies think the wording needs update. The updated CR is R2-2002151 with incorporating the comments from Nokia, DOCOMO and MediaTek, 1 company thinks the correction is minor. Considering the majority’s view, rapporteur suggests agreeing the CR R2-2002151.

Proposal 2: RAN2 to agree the CR R2-2002151.

## R2-2001187

[R2-2001187](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_109_e\Docs\R2-2001187.zip) Correction on parameter description of beamManagementSSB-CSI-RS Huawei, HiSilicon CR Rel-15 38.306 15.8.0 0194 2 F NR\_newRAT-Core R2-1914663

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| --- | --- |
| **Company** | **Comments on the CR** |
| Intel | Ok |
| Qualcomm Incorporated | Support the CR. |
| Nokia | Agree with this. |
| NTT DOCOMO | O.K |
| Apple | Support the CR. |
| Ericsson | Ok. |
| Samsung | Support but it seems quite minor so separate CR does not really seem justified. |
| MediaTek | Support the CR. |
| ZTE | Support the CR. |
|  |  |

Summary:

9 companies participate in this offline.

All companies are agree the intention and wording of this CR, 1 company thinks the correction is minor. Considering the majority’s view, rapporteur suggests agreeing the CR R2-2001187.

Proposal 3: RAN2 to agree the CR R2-2001187.

# 3 Conclusion

Proposal 1: RAN2 to agree the CRs R2-2002152 and R2-2002153.

Proposal 2: RAN2 to agree the CR R2-2002151.

Proposal 3: RAN2 to agree the CR R2-2001187.