**3GPP TSG RAN WG1 #105-e R1-2105956**

**e-Meeting, May 10th – 27th, 2021**

**Agenda item:** 7.2.11

**Source:** Moderator (NTT DOCOMO, INC.)

**Title:** Summary on Rel-16 NR UE features related discussion

**Document for:** Discussion and Decision

1. Introduction

This contribution summarizes the discussions and proposals in AI 7.2.11 regarding UE features for FGs not dedicated to a specific Rel-16 WI/TEI.

Based on the discussions summarized in Section 2, following is a part of the suggested email discussions/approvals for AI 7.2.11.

**FL proposal #1 of email discussion/approval:**

**[105-e-NR-UEFeature-Others-01] Email discussion/approval on UE features that are not dedicated to specific Rel-16 WI/TEI**

* **For FG22-10, add below sentence to the note.**
	+ **For *pdcch-MonitoringAnyOccasionsWithSpanGap*, the supported set (set1, set2 or set 3) for cross-carrier scheduling with the different SCSs in the scheduling cell and the scheduled cell is still based on the indicated value for the band of the scheduling cell.**

Companies are encouraged to check above FL proposal #1 and to provide feedback if any in below.

|  |  |
| --- | --- |
| Company | Comment |
| Huawei | Y |
| Apple | We are okay with the proposal  |
|  |  |

In the latest UE features list in [3], there is one necessary editorial correction on FG number as below. It can be reflected in the updated UE features list.

|  |  |  |
| --- | --- | --- |
| 10. NR-unlicensed | 10-33 | Semi-persistent CSI report on PUCCH for unlicensed spectrum |

1. Discussion on New FGs that are not dedicated to a specific Rel-16 work item/TEI
	1. FG 22-10

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22. NR Others | 22-10 | Support of pdcch-MonitoringAnyOccasionsWithSpanGap in case of cross-carrier scheduling with different SCSs in the scheduling cell and the scheduled cell | Support of pdcch-MonitoringAnyOccasionsWithSpanGap in case of cross-carrier scheduling with different SCSs in the scheduling cell and the scheduled cell* Candidate values: {Interpretation2, Interpretation3}
 | 3-5b, 18-5 | Yes | N/A |  | Per UE | No | No | N/A | Candidate values: {Interpretation2, Interpretation3}If UE indicates Interpretation2, it supports 22-10 as long as pdcch-MonitoringAnyOccasionsWithSpanGap is supported for the band of the scheduling/triggering/indicating cell.If UE indicates Interpretation3, it supports 22-10 as long as pdcch-MonitoringAnyOccasionsWithSpanGap is supported in both the band of the scheduled/triggered/indicated cell and the band of the scheduling/triggering/indicating cell. | Optional with capability signalling |

Following proposal is made in a contribution.

|  |  |
| --- | --- |
| [1] | Below agreements were made in RAN1#104-e meeting. ***Agreement****Regarding the interpretation of UE capabilities in case of cross-carrier operation, for cross-carrier scheduling with the same SCS in the scheduling cell and the scheduled cell, RAN1 clarifies that support of* pdcch-MonitoringAnyOccasionsWithSpanGap *is based on both the support of this capability for the band of the scheduled/triggered/indicated cell and the support of this capability for the band of the scheduling/triggering/indicating cell.** *Note: For pdcch-MonitoringAnyOccasionsWithSpanGap, the supported set (set1, set2 or set 3) for cross-carrier scheduling with the same SCS in the scheduling cell and the scheduled cell is still based on the indicated value for the band of the scheduling cell.*

***Agreement****For cross-carrier scheduling with different SCSs in the scheduling cell and the scheduled cell, RAN1 introduces new Rel-16 UE capability to clarify the interpretation of* pdcch-MonitoringAnyOccasionsWithSpanGap *in case of cross-carrier operation.** *The detailed design of this new Rel-16 UE capability is to be discussed under Rel-16 UE feature session.*

***Agreement****LS to RAN2 on interpretation of UE features in case of cross-carrier operation is endorsed in* [*R1-2102085*](https://www.3gpp.org/ftp/tsg_ran/TSG_RAN/TSGR_91e/Docs/R1-2102085.zip)FG 22-10 was introduced to reflect the second agreement listed above. However, one minor issue to clarify for the FG is whether the number of spans/span-gap follow those of the scheduling cell or scheduled cell. We propose to follow the same principle as CCS with same SCS case (like the note in first agreement above). **Proposal : For FG 22-10, add below sentence to the note column:****For *pdcch-MonitoringAnyOccasionsWithSpanGap*, the supported set (set1, set2 or set 3) for cross-carrier scheduling with the different SCSs in the scheduling cell and the scheduled cell is still based on the indicated value for the band of the scheduling cell.** |

Based on the above, following proposal can be discussed in RAN1#105-e meeting.

### **Discussion point #1**

* **For FG22-10, add below sentence to the note.**
	+ **For *pdcch-MonitoringAnyOccasionsWithSpanGap*, the supported set (set1, set2 or set 3) for cross-carrier scheduling with the different SCSs in the scheduling cell and the scheduled cell is still based on the indicated value for the band of the scheduling cell.**

Reference

[1] R1-2105790 Remaining details of Rel-16 NR UE features Ericsson

[2] R1-2105814 Remaining issues on NR Rel-16 UE features Nokia, Nokia Shanghai Bell

[3] R1-2104120 Updated RAN1 UE features list for Rel-16 NR after RAN1#104bis-e Moderators (AT&T, NTT DOCOMO, INC.)