**3GPP TSG RAN WG1 #110 R1-2208196**

**Toulouse, France, August 22nd – 26th, 2022**

**Title:** DRAFT LS on updated Rel-17 RAN1 UE features lists for NR after RAN1#110 Thursday

**Response to:** -

**Release:** Rel-17

**Work Items:** NR\_FeMIMO, NR\_ext\_to\_71GHz, NR\_IIOT\_URLLC\_enh, NR\_NTN\_solutions, NR\_pos\_enh, NR\_redcap, NR\_UE\_pow\_sav\_enh, NR\_cov\_enh, NR\_IAB\_enh, NR\_SL\_enh, NR\_MBS, NR\_DSS, LTE\_NR\_DC\_enh2, NR\_DL1024QAM\_FR1, NR\_RF\_FR1\_enh, NR\_SmallData\_INACTIVE, TEI17, NR\_newRAT

**Source:** NTT DOCOMO, AT&T (RAN WG1)

**To:** RAN WG2

**CC:** RAN WG4

**Contact Person:**

#### Name: Hiroki Harada, Ralf Bendlin

E-mail Address: hiroki.harada@docomo-lab.com, ralf\_bendlin@labs.att.com

**Attachment:**  R1-2207923.zip (Updated RAN1 UE features list for Rel-17 NR after RAN1 #110 Thursday)

**1. Overall Description:**

RAN1 has continued to discuss the Rel-17 RAN1 UE features list for NR and would like to share the latest version with RAN2 in the attachment R1-2207923 according to RAN#96 guidance.

For NR\_ext\_to\_71GHz, the changes for FGs 24-11f, 24-11g, 24-11h, and 24-11i are based on the following RAN1 agreement:

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| **Agreement*** For the UE capability parameters for carrier aggregation according to Cases 4,5,6,7 agreed in RAN1#108e, support the following value ranges:
	+ Case 4: Capability on the number of CCs with Rel-17 monitoring capability only
		- Range of pdcch-BlindDetectionCA-R17: {[2 or 4], …, 16}
	+ Case 5: Capability on the number of CCs with Rel-15 monitoring capability and Rel-17 monitoring capability on different serving cells
		- pdcch-BlindDetectionCA-R15 for Rel-15 PDCCH monitoring capability
		- pdcch-BlindDetectionCA-R17 for Rel-17 PDCCH monitoring capability
		- Range of pdcch-BlindDetectionCA-R17 and pdcch-BlindDetectionCA-R15: {1, 2, …, 15}
			* Range of pdcch-BlindDetectionCA-R15 + pdcch-BlindDetectionCA-R17: {[3 or 4], …, 16}
	+ Case 6: Capability on the number of CCs with Rel-16 monitoring capability and Rel-17 monitoring capability on different serving cells
		- pdcch-BlindDetectionCA-R16 for Rel-16 PDCCH monitoring capability
		- pdcch-BlindDetectionCA-R17 for Rel-17 PDCCH monitoring capability
		- Range of pdcch-BlindDetectionCA-R17 and pdcch-BlindDetectionCA-R16: {1, 2, …, 15}
			* Range of pdcch-BlindDetectionCA-R16 + pdcch-BlindDetectionCA-R17: {[2 or 3], …, 16}
	+ Case 7: Capability on the number of CCs with Rel-15 monitoring capability, Rel-16 monitoring capability and Rel-17 monitoring capability on different serving cells
		- pdcch-BlindDetectionCA-R15 for Rel-15 PDCCH monitoring capability
		- pdcch-BlindDetectionCA-R16 for Rel-16 PDCCH monitoring capability
		- pdcch-BlindDetectionCA-R17 for Rel-17 PDCCH monitoring capability
		- Range of pdcch-BlindDetectionCA-R17, pdcch-BlindDetectionCA-R16, and pdcch-BlindDetectionCA-R15: {1, 2, …, 15}
			* Range of pdcch-BlindDetectionCA-R15 + pdcch-BlindDetectionCA-R16 + pdcch-BlindDetectionCA-R17: {[3 or 4], …, 16}
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RAN1 would like to inform RAN2 that these FGs are similar to corresponding Rel. 16 versions which have been discussed in R2-2109168 (R1-2110757) and R2-2202108 (R1-2112833) as part of NR\_L1enh\_URLLC-Core.

For NR\_ext\_to\_71GHz, RAN1 also discussed R1-2207815/R2-2208955/R4-2214215 (LS on Rx beam sweeping factor for RRM measurements) and concluded that RAN2 can change the maximum value of maxNumberRxBeam for FR2-2 in TS 38.331 without any further actions or inputs from RAN1

**2. Actions:**

**To RAN WG2**

**ACTION:** RAN1 kindly asks RAN2 to take into account the RAN1 NR UE features in the attachment for designing corresponding capability signalling in Rel.17.

**3. Date of Next RAN WG1 Meetings:**

TSG-RAN WG1 Meeting #110bis-e Oct. 10 to Oct. 19, 2022 E-meeting