**3GPP TSG RAN WG1#110bis-e R1-22xxxxx**

**e-Meeting, October 10th – 19th, 2022**

**Agenda Item: 8.2**

**Source: Qualcomm Incorporated (Moderator)**

**Title: Draft FL Summary Maintenance of Channel Access Mechanisms for NR in 52.6 to 71GHz band**

**Document for: Discussion, Decision**

## Issues for Channel Access Aspects

**Table 1 – Identified issues for Channel Access Aspects**

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| **Issue#** | **Issue** | **References** |
| CA-1  | UL Contention Exempt Short Control Signaling : Duty Cycle and Enable Disable | Nokia, Nokia Shanghai Bell[R1-2210055]Intel Corporation[R1-2209032]Qualcomm Incorporated[R1-2209940]Oppo[R1-2208827][R1-2208826] |
| CA-2 | ChannelAccess-CPExt field Indication within RAR UL Grant | NTT DOCOMO, INC.[R1-2210168]Huawei, HiSilicon[R1-2208477] vivo[R1-2208594]ZTE, Sanechips[R1-2208704]xiaomi[R1-2209250]LG Electronics[R1-2209447]Samsung[R1-2209692]Qualcomm Incorporated[R1-2209941]Nokia, Nokia Shanghai Bell [R1-2209432] |
| CA-3 | LBT Upgrade in COT Sharing and COT Resumption after a gap | WILUS Inc.[R1-2210137]CATT[R1-2208935][R1-2208934]Qualcomm Incorporated[R1-2209940]Nokia, Nokia Shanghai Bell[R1-2210053]  |
| CA-4 | Multi-Beam Channel Access : Independent per beam sensing procedure | Huawei, HiSilicon[R1-2208476]LG Electronics[R1-2209445]Samsung[R1-2209693]Huawei, HiSilicon[R1-2209845]Qualcomm Incorporated[R1-2209942]Qualcomm Incorporated[R1-2209943] |
| CA-5 | TCI State for Inter-Frequency RSSI | Ericsson [R1-2209183] [R1-2208182] |
| CA-6 | Sensing Beam for PUCCH or SRS | NTT DOCOMO, INC.[R1-2209868] |
| CA-7 | CSIRS Validation when CSI-RS is contention Exempt | AsusTek [R1-2207495] |
| CA-8 | Failure of Type 2 sensing  | WILUS Inc.[R1-2210136] |
| CA-9 | ED Threshold Editorial | Huawei, HiSilicon[R1-2209819] |
| CA-10 | Editorial*: beamCorrespondenceWithoutUL-BeamSweeping* | OPPO[R1-2208828] |

# References

Contributions related to Channel Access

1. R1-2208463, Remaining issues of channel access mechanism for 60 GHz unlicensed operation, Huawei, HiSilicon
2. R1-2208476, Corrections to multi beam channel access in TS37.213, Huawei, HiSilicon
3. R1-2208477, Corrections to channel access field in RAR UL grant in FR2-2 in TS38.213, Huawei, HiSilicon
4. R1-2208594, Correction on the short control signaling constraint, vivo
5. R1-2208595, Correction on the indication of channel access Types, vivo
6. R1-2208704, Correction on on ChannelAccess-Cpext in RAR UL Grant in TS 38.213, ZTE, Sanechips
7. R1-2208705, Clarification on Contention Exempt Short Control Signalling rules for UL in TS 37.213, ZTE, Sanechips
8. R1-2208706, Alignment CR on the parameter names in TS 38.213, ZTE, Sanechips
9. R1-2208707, Alignment CR on the parameter names in TS 38.214, ZTE, Sanechips
10. R1-2208826, Discussion on remaining issue short control signaling, OPPO
11. R1-2208827, Draft CR on resolving issue for short control signaling, OPPO
12. R1-2208828, Draft CR on editorial correction for higher-layer parameter setting, OPPO
13. R1-2208934, Discussion on channel access procedures upon detection of a common DCI for frequency range 2-2, CATT
14. R1-2208935, Correction on channel access procedures upon detection of a common DCI for frequency range 2-2, CATT
15. R1-2209031, Discussion on Applicability of the Short Control Signalling Exemption, Intel Corporation
16. R1-2209032, [draft] correction for short control signaling LBT exemption applicability in TS 37.213, Intel Corporation
17. R1-2209250, Correction on the bit length of ChannelAccess-CPext-CAPC field in DCI 0-1 and DCI 1-1 for FR 2-2, xiaomi
18. R1-2209430, Remaining issues on channel access mechanism, Nokia, Nokia Shanghai Bell
19. R1-2209432, Correction on ChannelAccess-Cpext field in random access response, Nokia, Nokia Shanghai Bell
20. R1-2209444, Remaining issues of channel access mechanism to support NR above 52.6 GHz, LG Electronics
21. R1-2209445, Draft CR for multi-beam channel access procedure in FR2-2, LG Electronics
22. R1-2209446, Discussion on multi-beam channel access procedure in FR2-2, LG Electronics
23. R1-2209447, Draft CR on channel access indication for RAR grant in FR2-2, LG Electronics
24. R1-2209692, Draft CR for ChannelAccess-Cpext in RAR UL grant in FR2-2, Samsung
25. R1-2209693, Draft CR for multi-beam channel access procedure in FR2-2, Samsung
26. R1-2209819, Corrections to ED threshold for use with Type 2 channel access procedure in FR2-2 in TS37.213, Huawei, HiSilicon
27. R1-2209845, Corrections to per-beam ED threshold for multi-beam COT in FR2-2 in TS37.213, Huawei, HiSilicon
28. R1-2209868, Draft CR on spatial domain filter for sensing in FR2-2, NTT DOCOMO, INC.
29. R1-2209871, Discussion on remaining issues for NR in FR2-2, NTT DOCOMO, INC.
30. R1-2209940, Draft CR on unified short control signaling exemption and channel access type upgrade, Qualcomm Incorporated
31. R1-2209941, Draft CR on ChannelAccess-Cpext field in UL RAR grant, Qualcomm Incorporated
32. R1-2209942, Draft CR on UL transmission with LBT per sensing beam, Qualcomm Incorporated
33. R1-2209943, Draft CR on EDT determination rule for COT with SDM or TDM transmission with per beam LBT, Qualcomm Incorporated
34. R1-2209944, Discussion paper on Maintenance for NR from 52.6GHz to 71 GHz, Qualcomm Incorporated
35. R1-2210053, Correction on UE resuming a UE initiated COT, Nokia, Nokia Shanghai Bell
36. R1-2210055, Correction on Short Control Signaling, Nokia, Nokia Shanghai Bell
37. R1-2210094, Correction on CSI-RS validation, ASUSTeK
38. R1-2210135, Remaining issue on channel access for NR from 52.6GHz to 71GHz, WILUS Inc.
39. R1-2210136, Draft CR on channel access after failure of Type 2 channel access for FR2-2, WILUS Inc.
40. R1-2210137, Draft CR on channel access procedure upon detection of a common DCI for FR2-2, WILUS Inc.
41. R1-2210168, Draft CR on channel access type indication in non-fallback DCI, NTT DOCOMO, INC.
42. R1-2209183, Discussion on LS response on TCI assumption for RSSI measurement for FR2-2, Ericsson Inc.
43. R1-2208182, [DRAFT] LS response on TCI assumption for RSSI measurement for FR2-2, Ericsson Inc.