**3GPP TSG RAN WG1 Meeting #105-e                     R1-21xxxxx**

**eMeeting, May 10th– 27th, 2021**

**Agenda Item: 7.2.2**

**Source: Moderator (Charter Communications)**

**Title: Feature lead summary on for initial access procedures enhancements**

**Document for: Discussion and Decision**

# Introduction

Two corrections to Rel-16 specifications and three reply LS discussion documents on RRM have been submitted to RAN1#105-e relating to initial access procedures for NR-U [1]-[3]. This first summary provides a list of the submitted corrections/clarifications.

# Corrections for SS/PBCH Block

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| Issue # | Description | Tdoc | Email discussion |
| 2-1 | Capture the following previously agreed conclusion explicitly in 38.214 Sec. 4.1:  • For semi-static channel access, SSBs that (partially) fall in the idle region of a fixed frame period should be considered as invalid. No PDSCH rate matching and no RLM/RRM measurement will be done for those candidate SSB positions. | [1] | TBD |

# Corrections for RACH

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| Issue # | Description | Tdoc | Email discussion |
| 3-1 | The term ‘operation’ may be interpreted as uplink operation or may also be interpreted as cell operation. One example is that for a PCell operating in unlicensed band, it may have a SUL link in licensed band, e.g. PCell downlink and normal uplink are in unlicensed band, SUL link is in licensed band. For this case, how to determine the term ‘operation’ when a UE selects SUL to transmit PRACH.  Discuss the following two options:  Option 1: ‘operation’ is determined by whether the PDCCH scheduling RAR is in unlicensed band or licensed band.  Option 2: ‘operation’ is determined by whether the PRACH is transmitted in unlicensed band or licensed band. | [2] | TBD |
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# Corrections for RRM/RLM

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| Issue # | Description | Tdoc | Email discussion |
| 4-1 | RAN2 LS on random value generation for RMTC-SubframeOffset.  If the rmtc-SubframeOffset is not configured:   * The generation is left for UE implementation [4] * UE shall generate the random value once per rmtc-Periodicity [3] * UE either generates a random value for subframe offset per rmtc-Periodicity to perform RSSI measurement (Alt.1, preferred) or is up to UE implementation (Alt.2) [5].   How to handle same issue in LAA:   * Outside of WI scope, leave to UE implementation [3][4] * Use the same handling for LAA as in NR-U [5]. | [3][4][5] |  |

# Proposal for phase 1 of RAN1#105-e

TBD based on company prioritization poll.

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| **Company** | **Views** |
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# References

1. R1-2104648, Invalid SSB in FBE for PDSCH rate matching, Qualcomm Inc
2. R1-2104763, Discussion on the remaining issues with shared spectrum operation determination, OPPO
3. R1-2104459 Discussion on LS from RAN2 on random value generation for RMTC-SubframeOffset Ericsson
4. R1-2105271 Discussion on RAN2 LS on random value generation for RMTC-SubframeOffset Nokia, Nokia Shanghai Bell
5. R1-2105080 Clarification on NR-U RRM measurement operation Apple