**3GPP TSG RAN WG1 Meeting #107-e R1-2112614**

**e-Meeting, November 11 – 19, 2021**

**Title: [Draft] LS on initial access for 60 GHz**

**Response to:**

**Release:** Rel-17

**Work Item:** NR\_ext\_to\_71GHz

**Source:** Intel Corporation [RAN1]

**To:** RAN2

**Cc:**

**Contact Person:**

#### Name: Daewon Lee

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**Attachments:**

**1. Overall Description:**

RAN1 would like to let RAN2 be aware that the RAN1 has made the agreements listed in the Appendix, regarding support for discovery burst transmission window (DBTW) for operation with shared spectrum channel access for 120, 480, and 960 kHz subcarrier spacing.

For operation with and without shared spectrum channel access in FR2-2, NR will support 64 candidate SSB positions in a half radio frame.

Currently, it is a working assumption in RAN1 that 2 bits will be repurposed in FR2-2 to convey up to 4 values of $N\_{SSB}^{QCL}$, a parameter used to derive the QCL assumptions for SSB. The 2 bits identified by RAN1 for usage are ‘subCarrierSpacingCommon’ and ‘spare’ bit contained in the MIB IE. Note that the former can be repurposed since according to WID for FR2-2, the SCS for SS/PBCH block and CORESET0 are the same.

RAN1 would like to ask RAN2 if they foresee any issues of using the ‘spare’ bit contained in MIB IE for purpose of signalling $N\_{SSB}^{QCL}$ to UEs.

RAN1 would like to kindly ask RAN2 to provide information on the above question.

**2. Actions:**

**To RAN4:** RAN1 would like to kindly ask RAN2 to provide information on the above question.

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

TSG-RAN WG1 Meeting #107-bis-e 17 – 25 Jan 2022 Online

TSG-RAN WG1 Meeting #108-e 21 Feb – 04 Mar 2022 Online

**4. Appendix: Relevant RAN1 agreements and working assumptions from RAN1 #106-e, #106-bis-e, and #107-e:**

Agreement:

Support DBTW for 120 kHz.

Agreement:

For 120kHz SSB, the number of candidates SSBs in a half frame is 64.

Agreement:

No other values of n other than agreed previously is supported for 120kHz SCS, where parameter ‘n’ is the set of values to determine the first symbols of the candidate SSB blocks for 120kHz SCS in agreement from RAN1 #104-bis-e.

**Agreement**

* Support DBTW with 480 and 960 kHz SCS.
* For licensed and unlicensed operation, support 64 candidate SSB positions in a half frame
* Working assumption: Use 2 bits for Q:
	+ SubcarrierSpacingCommon
	+ spare bit in MIB
* Send LS to RAN2 for confirming the use of the spare bit in MIB
	+ The use of 2 bits for Q can be revisited if RAN2 tells RAN1 that the spare bit cannot be used