

From: Eric King

To: Hung Le

Date: September 08, 2020

Subject: Request for Info - File # 0407-EX-CN-2020

Message:

Please see our response as below:

• Our system consists of 12 RRUs, which are deployed in section 114 & 115 lower bowl (figure 1) of Golden One Center stadium (G1C). Each RRU is installed under the seat, so there is a large path loss to prevent signal transmit far away (figure 2).

Figure 1 Locations of RRUs inside stadium

Figure 2 RRUs installed under seat

• Although the transmit power of each RRU is around 20dBm (or less), but the signal attenuates sharply within a very short distance. (please refer to the test results shown below). So we can be sure that no signal will radiate outside the stadium to interfere with other systems.

- o Transmitter was placed under the seat of L7 in section 114 (marked in green below) with 6dBm Tx power
- o Receiver on right arm rest of each seat
- o Number shown below is received RSSI (dBm) on each seat

Figure 3 RSSI test result over each seat in section 114

• Golden One Center IT team is managing systems inside stadium. We will ensure that no impact on commercial system deployed inside stadium. Based on the latest information, the commercial systems deployed inside G1C are listed below

- o Cellular 2G/3G/4G system (for AT&T, Verizon, T-mobile and Sprint) deployed over various frequency band below 2.5GHz
- o Verizon 5G system deployed over mmW band (>28GHz)
- o The police and fire department usually come in during events which are probably 27Mhz and 400-500Mhz.
- o G1C currently use 400-500Mhz for our internal walkie talkies
- o G1C Wi-Fi (802.11ac/ad) system over 2.4GHz band and 5GHz band

So we make sure that this system deployed over CBRS band has no impact on any commercial system listed above

• The deployment is 20MHz TDD system for field trial evaluation. System only needs 20MHz bandwidth (3680-3700) in most of the time. The request was to cover optional 5GNR testing with up to 100MHz bandwidth that will only be performed in the absence of co-channel/band usage. So it will not have any impact on PAL or other high-priority users (no such users inside stadium). 5G testing will be only performed after site survey.

• If FCC still think that such a deployment is potentially risky, we also accept the 50MHz bandwidth assignment (i.e. 3650 to 3700) which is same with previously granted short term licenses by FCC since 2019

• SAS capability is a feature on our roadmap to commercial, but not today.