

From: Owen Turnbull

To: Behnam Ghaffari

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Subject: FCC File No. 1548-EX-ST-2020

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Message:

1. Explanation of how would you coordinate any usage with a Spectrum Access System (SAS).

We have applied for and received a Temporary FCC ID from Google SAS so that we may temporarily register our equipment in the SAS system. We have also applied for and received Test Certificates from the Google SAS system. By registering our system in the SAS domain with where we will be transmitting and the frequencies of test operation we will be able to avoid issues with other users in the area, and other users applying in the SAS system will be bale to see us.

2. Explanation of How would you specifically avoid causing interference to incumbent and commercial operations in the band, including General Authorized Access (GAA).

To avoid PAL users we intend to transmit outside of the frequency ranges where the PAL users are assigned. We intend to use frequencies that are in the 3660-3700 MHz range which is part of the GAA band. When submitting our information in the SAS system we will be looking as to who else might be active near to where we intend to place our test equipment. We will also do a scan of the spectrum where we would like to operate using a Spectrum Analyzer with a Low Noise Amplifier to determine if the spectrum is clear. We will also consult the ULS database to ensure that the operation will not cause harmful interference to any existing registered stations in the 3650-3700 MHz band, and notify the registered users in the proposed geographic areas prior to operation in this band. We will also look to maintain frequency separation from other existing users in the band. As the distance that we would like to transmit over is very small we will be limiting our RF footprint by down-tilting the antennas, reducing the transmit power of our radio's (up to 20 dB) and adding 6 dB attenuators if necessary. By mounting the test antenna on the side of the building will also have a big impact on reducing the footprint to a specific direction.