

Adeunis-NA, Inc. STA RF Interference – Exhibit "B"

The Vokkero system has a rated output of only 233 milliwatts (0.233 watts), as it is designed to be worn by its users. At 900 MHz and above, most of the radiated energy is lost to absorption, further reducing the interference potential. Moreover, this energy is spread over a minimum of 300 kHz of bandwidth, which, when used as requested in a spectral area populated entirely with 12.5 kHz bandwidth channels, assures an additional attenuation per channel of more than 12 dB. To assess the practical likelihood of interference, we take as a worst-case, the Georgia Dome in Atlanta, which is one of only four SEC stadium locations which have the requested spectrum in use at all in the general area of the stadium.

Examining the site-based uses between 900 and 901 MHz within 40 kilometers of the center of the 50-yard line in the Georgia Dome, we find only two licensees: Colorado CallCom, under WPMI283, licensed with three channels at a distance of 1.39 kilometers, and FCI 900 Inc., licensed under WQHW643, inter alia, on thirteen channels at a distance of 0.46 kilometers.

WPMI283 in the Atlanta area is a single-location system. Its frequencies are 899.9875, 900.0, 900.9125 and 900.925, with base ERP at 1,000 watts and mobile ERP at 35 watts. Though the Vokkero system effective ERP would be approximately 20 milliwatts in comparison to the licensed mobile ERP of 35 watts, in this instance the STA frequency choices would be made to avoid those three channels, i.e., above 900.3 MHz and below 900.8 MHz.

FCI 900 Inc., by contrast, has dozens of locations within the typical 40 kilometer maximal range of 800-900 MHz facilities (one cannot infer mobile range from the license data, as it is common to see 113 kilometers listed, an unlikely and impractical distance). WQHW643 at 460 meters and WQHW587 at 950 meters are typical--each has exactly fifty licensed channels. In the extremely unlikely event that a Vokkero transmission could be received by an FCI base station receive antenna, and the even lesser likelihood that it could somehow overpower an incumbent 100 watt mobile radio, the cellular architecture could easily survive the temporary loss of a channel or two. Moreover, that same cellular architecture would allow reception at other base receiving locations, of which there are many in the area.

Lastly, we point out that referees on the field using the Vokkero system would be completely surrounded at all azimuths and all practical elevations by the stadium seating, effectively containing the requested transmissions entirely within the stadium. Since the system will only be used on "game day", and since in most requested locations it is completely unused, we see no possibility of harmful interference from this STA.

Thus, the applicant has agreed to tailor its spectrum choices, where necessary, by market to avoid any interference, as it is required to do.