

Example Exhibit – UNII - 5 & 7

Applicant seeks a two (2) year experimental license to study the functionality, capabilities of Wi-Fi 6E, 5G NR-U, potential interference and co-existence of Wi-Fi 6E/5G NR-U with the incumbent licensed Fixed services in the 6GHz (UNII-5, UNII-7) bands. The wireless communication systems using pre-AFC certified equipment operating in the UNII-5(5925 – 6425MHz) and UNII-7(6525 – 6875MHz) spectrum bands **at the location of AT&T Center for Learning, 6301 Colwell Blvd, Irving, Tx 75039.**

The experimental equipment is based on the industry standards organization IEEE 802.11ax/WFA Wi-Fi 6E standard or 3rd Generation Partnership Project (“3GPP”) LTE-LAA/5G NR-U standard, and in conformance to FCC 6 GHz Unlicensed Use Report & Order (FCC 20-51; ET Dkt 18-295; April 24, 2020) for transmitter powers and channel bandwidths.

The Wi-Fi 6E low power equipment is available on commercial market now. The standard power Wi-Fi 6E experimental is expected to be available before the end of 2021.

Wi-Fi 6E and 5G NR-U systems will utilize advanced antenna technologies with multiple in multiple out (“MIMO”) and beamforming technologies, as well as more efficient coding and modulation schemes. These technologies are expected to result in higher spectral efficiencies, reduce latency, and enable gigabyte per-second (Gbps) broadband services.

Applicant’s Wi-Fi 6E experiments will involve communications between Access Point(s) placed indoors or outdoors. The Wi-Fi 6E wireless link will be established between the AP and user devices in the form factors of a smartphone or laptops, located close to AP within a general Wi-Fi AP coverage area. The AP will connect to a LAN traffic server for performance/interference tests or connect to an ISP internet service for functionality/performance/interference tests.

The AP and user devices placements:

HUMAX	XP-32AX48	25ft AGL (indoor, about 6 ft above 2 nd . Floor)
ASUS	AXE11000	10 ft AGL
NetGear Nighthawk	RAXE500	10 ft AGL

User Device (Samsung GS21 Ultra and the PC with Intel AX210 Cards), 10 ft AGL

The investigative test studies using this license before the available AFC will provide valuable information of potential performance of services provided through the Wi-Fi 6E systems, potential interference impacts of unlicensed use of 6GHz to incumbent fixed service, feedbacks

to regulatory and standard bodies enabling future standards improvement and system optimizations.

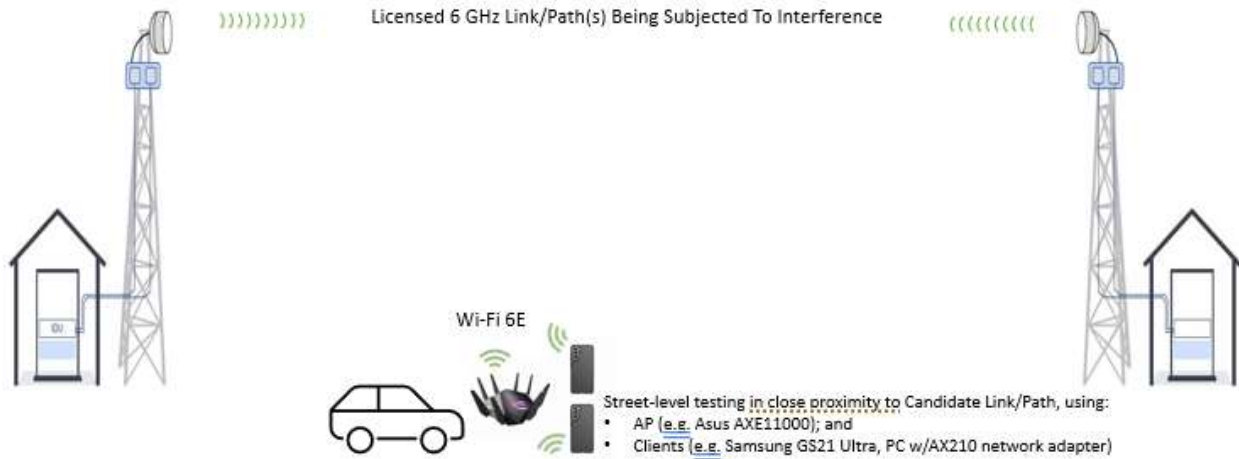


Figure-1: Sample of Outdoor Test Setups

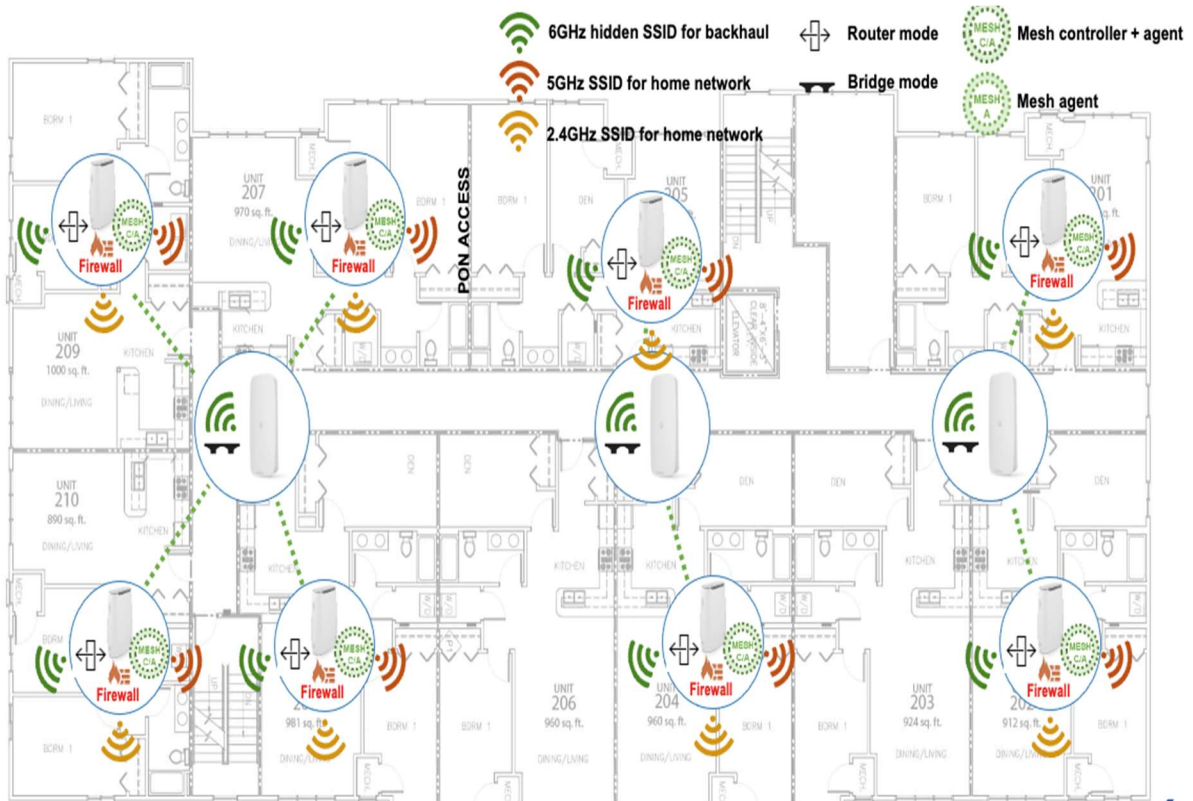


Figure-2: Sample of Indoor Test Setups