

April 17, 2023

The undersigned companies have reviewed the *Draft 6 GHz KDB*¹ Office of Engineering and Technology's (OET's) Laboratory Division, published on March 17, 2023, and provide the following comments for the FCC's consideration:

Comment 1:

In Table 3, the row "Maximum EIRP above 30 degrees D02" indicates that the EIRP limit applies to 6FX Standard Client devices. The 30 degrees attenuation requirement should apply only to outdoor standard power access points and fixed client devices operating in 5925 – 6425 MHz and 6.525-6.875 GHz band as stated in measurement procedures (page 33).

Comment 2:

The *Draft 6 GHz KDB* states that an "indoor client device" "dual client device" "cannot have a direct connection to the internet". We seek clarification on this statement since many client devices connected to an indoor access point (AP) have a direct connection to the internet as well. For example, a smartphone or a tablet might connect to a SP AP as a client while also having cellular connectivity. Such devices take advantage of local area coverage by SP APs to have better connectivity.

Comment 3:

We urge the Lab to consolidate the various non-fixed client classes for equipment certification into a single category. Rather than referring to "low power indoor client," "standard client," and "dual client," the *Draft 6 GHz KDB* should simply refer to "non-fixed client." This approach conforms to 47 C.F.R. § 15.403, which refers to clients with a single definition ("client device"). The Commission adopted this approach because the parameters governing a client's operation are not controlled by the device but are instead dictated by the access point to which it is connected. *See, e.g.*, 47 C.F.R. § 15.407(a)(8). There are no other distinctions amongst non-fixed clients, as evidenced by the *Draft 6 GHz KDB*'s lack of requirements like product form factor or labeling for the various categories of clients.

Administrative class distinctions amongst clients are not only inconsistent with the Commission's rules but undermine the agency's policy goals. First, certification of "low power indoor" clients and "standard power" clients increases the risk of confusion amongst consumers, who will reasonably expect that their 6 GHz-enabled devices can connect to all 6 GHz networks. Second, it will create undue burdens on network operators, who may be forced to choose between deploying 6 GHz networks that can reach only a portion of client devices or utilizing redundant indoor and SP APs to reach all client categories. Finally, networks with such

¹ Notice: A draft, 987594 U-NII 6 GHz devices 5.925-7.125 GHz DR02-45002 (Mar. 17, 2023)

redundant APs will be far less energy efficient than those with a single type of AP that can serve all clients.

Comment 4:

Under measurement procedures, Section I, a procedure for testing client device's power adjustment is provided. While the setup and test are appropriate, we would like to note that a special test AP would be required that reduces its advertised power for client devices by steps of 3 dB without being under control of a real AFC system.

In addition, testing down to a minimum rated power creates significant test redundancy and is not typical or necessary for this functional type of test. A minimum rated power may also create confusion with test labs. Products may operate at minimum power levels where the test procedure as it stands would require greater than 10 discrete measurements to demonstrate that the equipment is operating correctly. This is excessive for a functional test and a better solution to reduce the redundancy, whilst still ensuring compliance, would be as follows:

We recommend that steps 6 and 7 in the Test Procedure for Section L are replaced with:

6. Repeat Steps 2 through 5 at two other randomly selected measurement points within the operating power range of the Client.

Comment 5:

The draft 6 GHz KDB defines "independent systems" as devices with separate "GPS" instruments. However, references to GPS in footnote 23 should be clarified to indicate that the footnote is not limited specifically to GPS but applies to all GNSS and other geolocation technologies.

Comment 6:

The *Draft 6 GHz KDB* states that a Persistent Inquiry Approval (PIA) inquiry should be submitted by a Grantee seeking approval. *See* draft KDB Section 10.3. In some cases, the geolocation solution might be provided by a third party. We recommend the FCC to accept PIA submissions for approval by geolocation solutions providers. Grantees of standard power equipment can include approved PIAs along with their exhibits. This approach would allow different Grantees using the same third-party geolocation solution to obtain certification without each Grantee obtaining PIA separately (for the same method). This approach would also allow better trackability of the geolocation solutions.

We would like to take this opportunity to thank the FCC for their work on releasing the *Draft 6GHz KDB*. We are looking forward to release of the final version and the start of Standard Power device certifications.

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