American Telecommunications Certification Body Inc.
6731 Whittier Ave, McLean, VA 22101

January 5, 2004

RE: WaveIP Ltd.

FCC ID: QQ2-GA24-RSU

After a review of the submitted information, I have a few comments on the above referenced Application.

1) Since the device connects to a computer (contains Ethernet connections) and used for residential customers, the device is also considered a class B PC peripheral subject to either 1) DoC (note that DoC authorizations require a lab meeting the requirement of 2.948(d)) or alternatively 2) Certification (requiring FCC or TCB review) for this part of the device. Note that the labeling and manual information are different depending on which process was used for approval of the PC Peripheral device (DoC / Certification). Currently the device does not appear include proper labeling (15.19) or manual information (2.1077 - see below) for a DoC authorization. If the device is to be subject to a DoC, please explain compliance to 2.948(d). Please explain which route is being used for compliance. Additionally, please confirm that the appropriately fully configured system according to ANSI C63.4 has been tested (also see question 2 below).

   Note that certification would be considered as a composite application and 2 certificates (one for the TX, one for the PC peripheral portion) would be issued. Additional information may be required and there are additional review costs associated with this additional certification.

   FYI:
   COMPLIANCE INFORMATION FOR DoC AUTHORIZATIONS (47CFR 2.1077)

   If a product is tested and authorized under a Declaration of Conformity, a compliance information statement shall be supplied with the product at the time of marketing or importation, containing the following information on a single page:

   (1) Identification of the product, i.e. name and model number.

   (2) A statement similar to that contained in Section 15.19(a)(3) that the product complies with Part 15 of the regulations.

   (3) The identification, by name, address and telephone number, of the responsible party. The responsible party is defined as either the manufacturer, or if the equipment is imported, the importer. The responsible party for a Declaration of Conformity must be located within the United States.

2) Test configuration photographs do not appear to show the device positioned as required by ANSI C63.4. Part 15 TX's should follow ANSI C63.4 13.1.2 or provide an adequate justification as to the configuration used for TX testing being different than specified by ANSI C63.4 . Note that regardless, the authorization for the PC peripheral portion (whether Certification or DoC) should follow setup guidelines for both positioning and maximizing the test configuration per ANSI C63.4 12.1.2. It does not appear that the measurements made for section 4.6 meet these requirements.
3) Since the device contains an internal antenna connector, power measurements should be made by making a direct antenna conducted measurement. Please provide this data and/or a justification for the antenna substitution method.

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4) A duty cycle correction factor has been used for average emissions. It appears that the wireless interface uses an 802.11b design based on modulations and channels of operation. An 802.11 interfaces can not normally guarantee a maximum duty cycle since "burst" modes or similar can sometimes occur which cause a > 99% TX cycle for any 100 msec period of time. It is not certain if this device can maintain the maximum duty cycle of 65% provided, especially if the air interface is 802.11b. Please provide detailed theory of operation from the manufacturer to support worse case modes of operation. This may affect compliance of the plot shown in A72.
5) The margins appear to be calculated on page 15 incorrectly for the data associated with Plots A55 and A38.
6) The test data for > 1 GHz was taken with an average detector only. Although the limits for 15.209 are average limits, there is also a limit for the peak emission (20 dB above the average emission). The test report did not present any peak data or information regarding the peak to average ratio for this device. Please provide further information to prove compliance with the peak limits.
7) FYI…The FCC equipment code for the TX portion of this type of device is DTS.

Timothy R. Johnson
Examining Engineer

mailto: tjohnson@AmericanTCB.com

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information may result in application termination. Correspondence should be considered part of the permanent submission and may be viewed from the Internet after a Grant of Equipment Authorization is issued.

Please do not respond to this correspondence using the email reply button. In order for your response to be processed expeditiously, you must submit your documents through the AmericanTCB.com website. Also, please note that partial responses increase processing time and should not be submitted.

Any questions about the content of this correspondence should be directed to the sender.