



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

August 1, 2002

RE: Eka Systems, Inc.

FCC ID: P9X-EMS-MM-GE

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

- 1) Please confirm that confidentiality is NOT requested on the parts list. If Eka Systems wishes to request on this exhibit, please update the confidentiality letter.
- 2) Please provide external photograph that show the EUT as tested, a photograph showing placement of the board inside the device, additional photographs to show the general construction of the internal portion of the meter the device was tested within, and a clear photograph of the back of the TX module.
- 3) The Theory of Operations/Users Manual discusses this transmitter board being an accessory board installed in an electric meter. Please provide information regarding what meter(s) this will be installed within (Test Report lists General Electric kV Vector). If Eka Systems wishes this filing to be representative of multiple meters, then this fact should be clearly represented in the application and detailed information provided as to the construction variances between the meters (and justify why they do/do not affect EMI). Depending on the construction differences, test data may be required for each model, or at least to be obtained in order to determine the worse case model. Without this information, the filing can only cover the product as tested. Construction difference between meter makes will likely require a permissive change. Please let me know how you wish to handle this issue.
- 4) The submittal seems to partially support a modular approval but does not request this, provide the necessary information for modular approvals, nor was the sample tested in a stand alone configuration. The operational description mentions the board as an accessory board (retrofitting?). This also tends to suggest a modular approval. A limited modular approval (LMA) may be a suggestive course of action here but does not appear to be requested or tested as such. Please comment.
- 5) Please explain if this device is offered for sale only as an upgrade, or will it also be sold already installed in a meter.
- 6) The labeling information should also include the statements required by 15.19(a)(3)
- 7) From the photographs provided and the labeling information, it is not clear where the label is placed relative to the whole device and if it is readable from the outside of the device. Please provide further information and/or photographs.
- 8) I have a concern with the label if it can't be viewed from the outside. The "two part" label [15.19(a)(3)] will never be seen by the end user unless he disassembles his electric meter. This is an unlikely event. The device is larger than the palm of your hand, therefore I expect there should be easily enough "real estate" to place label on outside.
- 9) In addition, if "retrofitting" is permitted, how does the Applicant propose to meet the labeling requirements?
- 10) Devices of this type are typically classified as mobile, but the RF exposure information classifies the device as a 'fixed' device. 'Fixed' requires that the user maintain 2 meters between humans/users and the antenna. Given the output power and antenna gain information, it might be better to consider the device as a mobile transmitter (>20 cm from antenna). Otherwise, please justify how 2 meter will always be maintained for RF exposure compliance.
- 11) The users manual should include RF exposure information such as (sample given is for mobile classification):

"NOTE: The antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter."
- 12) The users manual appears to be for part of a system. Shouldn't the users information specified in 15.105 be included in the manual?

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- 13) The information in this submittal mentions that the Blue Tooth Module is capable of +20 dBm, but has been set to +10 dBm. Please confirm that the power is not adjustable in the field or by the end-user.
- 14) The peak radiated data does not appear to calculate properly in the tables, please explain.



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Examining Engineer

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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.