American Certification Body Inc. 6731 Whittier Ave, C110, McLean, VA 22101

September 22, 2015
RE: Otodata Wireless Network, Inc.
FCC ID: 2ADQFC003
IC: 12649A-C003

ATCB017333

After a review of the submitted revised information, I have the following follow- up questions. Depending on your responses, kindly understand there may be additional comments.

1. Regarding question 1, it appears that basic installation instructions have now been added to the User's Manual (though still nothing with respect to RFx compliance), however, it does not appear that a response has been provided for any other part of question 1-
    a. it is still unclear whether the EUT is a module or a final product (e.g., the revised Form731 still states that Modular Approval does not apply,

response: This is not a modular product.

    b. and the required FCC and IC Modular Checklists have not been submitted, but the set-up photos and revised internal photos show a module

response: The photo's do not use the term module, and the device under test is not for incorporation in other products and this device can operate as a standalone transmitter.

    c. and the revised User's Manual refers to the EUT as a "module"). Please respond to all aspects of question 1.

Response: A module has specific definition in FCC terms of "A single module is defined as a self-contained RF device that is normally designed with the intention of integration into a host device". This device is capable of standalone operation with any valid RS-485 signal input and the client has removed the term 'module' from the manual as per the latest revised manual submitted.

2. Regarding the response to question 2, the Operational Description submitted shows a list of channels in the "TX Table" that covers the span 923.0 – 926.0 MHz, and an "RX Table" that ranges from 903.0 – 906.0 MHz.
    a. What is meant by "TX" and "RX" in these headings? Is this an FDD system? Please clarify. TX = Transmit frequencies RX= means receive frequencies
    b. The test report indicates a transmit tuning range of 902.25-927.75 MHz – are additional hopsets also employed by the EUT that cover this entire range? Not presently…But we may use other hop sets in the future.
    c. The Operational Description does not provide any such information, nor does it indicate the modulation format employed- please clarify. SEE updated revised operational description which includes a sentence stating that the radio uses a 2FSK modulation format….

3. The IC website (database) lists the applicant's street address as being on "l'Acadie Blvd.", and the zipcode as ending in "5" (not "4"). Please revise the IC Application Form so that the applicant's address exactly matches what is shown on the IC site.
IC form updated

4 Regarding the EUT's antenna:

(a) Will the external antenna shown in the EUT photos and Test Set- Up photos always be marketed with the EUT? YES

(b) Please describe the antenna that will be marketed with the EUT (manufacturer/type/peak gain)- Mfg is Wellshow, Type: QuarterWave, Peak gain 2.14dbi. please note that your response may entail that additional required information be included in the Manual for IC; (b) Page 7/70 of the DSS EMC report states that the EUT is designed with an integral antenna or a proprietary connector –
B2. is there also an option for an integral antenna, used instead of the external antenna shown in the photos?NO If so, please describe it.

(c) Please describe the referenced proprietary connector, explaining how it complies with the requirements of Section 15.203; REVERSE POLARITY SMA (RP-SMA)

(d) (d) The FCC MPE Exhibit lists a maximum antenna gain used in the calculations of 5 dBi – please confirm that this is the gain of the antenna that will be marketed with the EUT; YES THIS IS THE MAX

(e) and (e) some of the Internal Photos show a pigtail with an SMA connector connected to the EUT- is this available as an option? This was for test purposes only.

(f) If not, and it was only added for testing purposes, please revise the application to make this clear. Commentary on the internal photo exhibit will be added.

5. In the calculations, the MPE Exhibits use the measured, conducted output level of 955 mW. Please specify the EUT's target output level and accepted tolerance. Please note that the target level plus tolerance is the value that should be used in the MPE calculations- please address.
Target is up to 999mw. Exhibit to be modified.

6. The IC MPE Exhibit lists the IC MPE limit for 902 MHz, per RSS-102 Section 2.5.2, but states that the distance used for calculations was 20cm. RSS-102 Section 2.5.2 specifically states that it is intended for separations distances "greater than 20cm", while distances of 20cm are addressed in the previous Section – please address. In addition, per RSS-102 Section 2.5.2, the limit is in terms of EIRP, however, the Results section of the IC MPE Exhibit only references the EUT's peak conducted output – please revise to compare the EUT's peak EIRP with the appropriate IC exclusion limit.
> 20 cm at all times. Exhibit to be modified to account for antenna gain.

7. The Internal Photos show a terminal block on the EUT- please confirm that it was populated/investigated during the testing, including the testing performed on the digital portion of the EUT.
We confirm this was investigated. This portion of the device was tested for compliance during a FCC Part B subpart B verification that was not submitted.

8. A revised test report was just uploaded for this and another Otodata application- please advise if any other files are being submitted prior to review of the revised documents already submitted for ATCB017336 and ATCB017337.
9. **FYI:** it is requested that, in the future, rather than simply uploading revised documents with no indication as to what the revisions are, you also upload a document that lists the comments sent to you and provides a brief response, or an indication of the revision/document/page for each comment. This would greatly speed up the review.

10. Regarding the response to question 1, if the EUT is not being authorized as a module, then please provide external photos showing all sides of its enclosure, and as well as justification for the test configuration, which does not include the enclosure (the addition of an enclosure may potentially have a negative impact on the test results). The User's Manual states that there is no enclosure for the EUT- please note that, unless modular approval is obtained, only aonly a finished product, including its enclosure, may be certified. Please address.

Response: The device is not sold or marketed with an enclosure; however it is a standalone transmitter. Although it may frequently be installed in a alarm control panel case, this is not under the control of the manufacturer. The device may be purchased and used without any case connected to any valid RS485.

11. Regarding the response to question 1, please revise the User's Manual to also include: (a) the minimum separation distance between the EUT's antenna and all persons during normal operation required for RFx compliance, and (b) the statement to the user required by Section 15.21.
User manual updated

12. Regarding the response to question 5: (a) the response to (a) lists the peak antenna gain as 2.14 dBi, but the response to (d) states that the max gain is 5 dBi – which is correct? Please clarify
. (b) The response to (e) states that the pigtail with SMA connector may be an option for the EUT – if the connector is SMA, it would not comply with the requirements of Section 15.203 – please clarify.
Response: The client misunderstood the request. The version with the SMA is not sold or marketed. The pigtail cable was added for test purposes. The internal photo exhibit has been modified to note this.

13. The response to question 10 is not clear – was the terminal block populated and investigated during testing to determine if doing so adversely affects the emission levels? Please clarify.
This was verified and covered by separate testing not currently covered under the certification submittal for the wireless.

14. All older RSS-210 data that now falls under the RSS-247 standard (issued in May of this year) must be tested and presented to meet the RSS-247 requirements. The grandfathering

period allowed has now lapsed. We are unsure if this particular device would require any retesting or only administrative corrections, however, please review and correct as appropriate.
Report corrections have been performed.

Thank You,
Gregory Czumak
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