

# American Telecommunications Certification Body Inc.

6731 Whittier Ave, McLean, VA 22101

June 4, 2008

RE: Extricom Ltd.

FCC ID: VDJ-EXRP40E & VDJEXRP20E

After a review of the submitted information, I have a few comments on the above referenced Application. Depending on your responses, kindly understand there may be additional comments.

# For FCC:

- 1) Due to various concerns recently seen about proper authority being given to others for FCC and/or IC matters, the agency letter (and ideally confidentiality letters as well) should be signed by someone traceable to have the proper authority. For instance, the FCC site shows Eriz Aharon as the correct contact of authority for FCC matters. Therefore the agency letters and confidentiality letters should be signed by this contact or alternatively a letter showing who he has "deputized" (i.e. Eran Shpak) to sign on his behalf may be provided as well. For further detail see: https://fjallfoss.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=33316&switch=P
- 2) Internal photographs must show top and bottom of the RF board as well. Additionally, if an RF shield is in place, photographs should show both with and without the shield.
- 3) Users manual appears to be missing 15.105 information. Please update.

#### DTS

- 4) Test report for DTS references DA 00-705. This is a frequency hopping test method. Other methods should have been applied. See: https://fjallfoss.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=21124&switch=P Additionally, where multiple methods exist (i.e. power, spectral density, etc.) – the specific method used should be cited somewhere with the test data (Method 2, etc.) to explain which particular method was applied.
- 5) For power it is uncertain if a combiner technique or not. Generally the FCC does not want to see combiner techniques as they can create anomalous results in some cases. FCC Prefers to do numerical summation for these types of devices (see next comment). Additionally, it appears the method used was Option 2, method 1. However detector should be set to sample and not AVG for these. Please review.

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6) FCC does not require to consider aggregate power in this case as long as there is no coordination between the multiple transmitters. While the operational description cites the are independent and are not coordinated, the FCC has asked to provide information that demonstrates that the equipment does not use the multiple transmitters for the following:

- to send the same information over separate transmitters (Internal maintenance traffic may be permitted).
- Separate transmitters are delivering traffic to a single remote device divided into separate simulations transmissions.
- Describe what transmitters are operating under the same equipment class and/or rule part frequency band.
- Other conditions for multiple transmitters within a single enclose that may be applicable:
  - o Multiple transmitters using Frequency Hopping protocols under 15.247 are not permitted (under any condition) to coordinate transmissions to avoid different transmitters occupying the same frequency channel.
  - o The ensemble of all transmitters must comply with all applicable radio frequency exposure rules, guidelines and interpretations.
  - Held to ear handset devices being tested for Hearing Aid Compatibility (HAC) must ensure that there is no interrelated influences form other transmitters operating simultaneously on the HAC rating on the specific air interface bands marketed.
  - Testing compliance to all other emissions must account for interactions among worst case active transmitters.
- 7) If power is measured using one of the techniques using a SAMPLE detector, then section 4.4 of the report should use -30 dB as the limit, not -20 dB. Please note that not all measurements appear to meet -30 dB. This may dictate which method should be used for power (PEAK). Please review
- 8) It is not understood why a combiner may have been used for spectral density tests. The operational description cites the radios can not operate on the same channels at the same time. Please explain.
- 9) Please update any affected exhibits for any differences in power from adjustment of the technique (i.e. RF Exposure, Users manual if listed, etc.)
- 10) Page 7 of report mentions multiple beams. This device does not appears to be a beam forming device. Please explain.

#### UNI

- 11) Test report for UNII references DA 00-705 and also incorrect references to 15.247. DA 00-705 is a frequency hopping test method. Other methods should have been applied. See: <a href="http://fjallfoss.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=21082&switch=P">http://fjallfoss.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=21082&switch=P</a> Additionally, where multiple methods exist (i.e. power, spectral density, etc.) the specific method used should be cited somewhere with the test data to explain which particular method was applied
- 12) It is not understood why a combiner may have been used for spectral density tests. The operational description cites the radios can not operate on the same channels at the same time. Please explain.
- 13) It appears the method used was Power method 1. However detector should be set to sample or peak and not AVG for these. Please review.

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14) Page 7 of report mentions multiple beams. This device does not appears to be a beam forming device. Please explain.

- 15) The exact power spectral density method used does not appear to be provided/explained.
- 16) Power spectral density should use peak or sample detectors depending on what method was applied. Data showed AVG. Please review.
- 17) It is uncertain which power method was appropriately applied, so the peak excursion measurement settings for trace 2 could not adequately be evaluated.
- 18) Please explain compliance to 15.407(f).
- 19) Where is compliance to 15.407(g) found?

## Additional:

- 20) FYI...It appears these radios are not intended for direct connection to a PC. If so, then the DoC labeling and approval under DoC may not be necessary. This is only intended for device that attach directly to a PC.
- 21) FYI...Users manual makes mention of possible 802.11n in the future. Depending on how this is accomplished it is very likely it will require a new FCC ID.
- 22) FYI...In the future please note that the FCC prefers Spectral density for 15.247 to be performed using 3 kHz. It is assumed that 10 kHz used here would be worse case.

### For IC:

- Typically emissions designators are given as G7D for 802.11g and 802.11a. 802.11b is typically listed as G1D.
- 24) RX emission for UNII do not appear to be provided as required by RSS standards.
- 25) Please show where compliance to RSS-210 A9.5 (2) may be found.
- 26) RSS-210 A9.5(7) has several manual requirements which do not appear to be fully covered in the manual. Please review.

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.