HERMON LABORATORIES

March 6, 2003

American TCB
6731 Whittier Ave
Suite C110
McLean, VA 22101
Attn: Mr. T. Johnson, Examining Engineer

RE: your e-mail dated March 6, 2003; WaveIP Ltd.
FCC ID: QQ2-GA24

Dear Mr. Johnson,
Please find below the answers to your questions.

1. The test report WAVRAD_FCC.15365_rev2 with corrected page 9 (removed reference to MT 364023 antenna, corrected names of 364028/NV, 363010/HN/NV) was uploaded on March 6, 2003 via Test Report folder.

2. WaveIP intends to market the GigAccess product as a system that requires professional installation for all installations. It is mentioned in the User Guide. Please see warnings at page 17 (middle and bottom), page 18 (bottom). The User Guide_030603 was uploaded on March 6, 2003 via Users Manual folder.

3. An updated information on MT-363010/HN and MT-363010/VN antennas and photographs of these antennas were uploaded on March 6, 2003 via Additional information (WaveIP Antennas_photos, .
4. The 24 dBi parabolic dish antenna can be used for point-to-multi-point and for point-to-point applications.

- When using the parabolic dish for point-to-multi-point: The installer is responsible for adjusting the output power so that the EIRP will not exceeds 36dBm. see the important warning on page 17 at the bottom, and see also paragraph 2.4.3.2.
- When using the parabolic dish for point-to-point: the limitation of 36dBm is not exsists any more. We are following the FCC rule 15.247(b)(4)(i):
  Systems *"that are used exclusively for fixed, **point-to-point** operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum peak output power of intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi"*

  The above is relevant for max transmitting power (before antenna) of +30 dBm. Therefore if the transmiting power is 18.5 dBm we can use the 24 dBi antenna without reducing the 18.5 dBm tx power and reach an EIRP of +42.5 dBm. The following table gives the max transmit power and EIRP versus antenna gain for point-to-point.

Max Transmit Power [dBm]	Antenna Gain [dBi]	EIRP [dBm	Remarks
30	6	36	
29	9	38	
28	12	40	
27	15	42	
26	18	44	
25	21	46	
24	24	48	GigAccess max Tx Power is much lower than permitted by FCC
23	27	50	
22	30	52	
21	33	54	
20	36	56	
19	39	58	
18	42	60	This is the EIRP limitation for point-to-point for 18dBm tx power.

Due to the fact the EIRP could exceeds 36 dBm for point-to-point this option is protected by password. (see 2.4.3.2 and 10.4.1 page 45 at the top).
In addition the following warning exsists in the User Guide page 17:
"To comply with the FCC 15.247(b)(4)(iii), the equipment should be professionally installed. The installer is responsible for ensuring that the system is used exclusively for fixed, ***point-to-point*** *operation!"*

5. HL

6. Appendix A was updated. 23 dBi and 24 dbi antennas are ideals for "Long Range Multipoint and for point-to-point".

7. In GigAccess solution co-location occurs when multiple antennas are present at a specific site (similar to cell tower). The GigAccess base station site is expected to consist a multiple EUTs and no other types of transmitters involved.

Written by:
Michael Dayan, Software Director
WaveIP Ltd.

5. HL:
The "Exposure_ limit_15365_new.doc" uploaded on February 19, 2003 contains calculations for output EIRP of +36 dBm for point-to-multipoint applications (done according to your request dated February 4, 2003, clause 10 and recommendations for spurious emissions measurements with all types of antennas).

The "Exposure_limit_15365.doc" uploaded on January 30, 2003 contains calculations for output EIRP: measured Tx output power 18.4 dBm + 24 dBi (maximum antenna gain) = 42.4 dBm for point-to-point applications.
Timothy, please clarify, what calculations should be done.

Many thanks for your support and patience.

Sincerely,

Marina Cherniavsky, Certification engineer
Hermon Laboratories