

Date: April 03, 2008

Subject: Request for additional information regarding FCC ID: IHDT56HP1

## **Reference:**

Correspondence Reference Number: Confirmation Number: Date of Original Email: IHD80257 803280257 April 02, 2008

# Prepared by:

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Questions and responses follow:

1. The application does not comply with the FCC's new Handset SAR requirements (see attached), released during the recent TCBC Workshop. It is not clear whether, in this application, simultaneous SAR measurements (BT and GSM) are required, if stand-alone BT SAR measurements are required, or if the BT is exempt from SAR measurements altogether. Please submit an internal photo of the EUT, showing the location of the BT and GSM antennas and the distance(s) between them. Please compare the BT conducted output power to Pref (from the new requirements), and, in conjunction with the antenna separation distance, determine the level of SAR testing required for the BT transmitter. Please submit this information.

**Response:** This device does allow simultaneous transmission between BT and CDMA. Because of the close proximity of the intentional and other unintentional radiating structures, stand-alone BT SAR measurements were performed in the configuration that resulted in the highest SAR during the stand-alone evaluation of the dominant transmitter. The SAR results from the BT and the CDMA measurements were summed together and shown to be less than the 1.6 W/kg (1g) SAR limit. Please refer to the revised SAR report attached.

Per the March 20, 2008 discussion with the examining engineer, Motorola chooses to use the summation method for evaluation of simultaneous transmitters. Photographs, measured distances, and power output levels to determine the "antenna pair SAR to antenna separation ration" are therefore not required.

2. Please show investigation of "comparing average power increases" stated on Page 16, Exhibit 11 to justify testing only two slots. It is not clear with the information given that 3 and 4 slot will conclusively result in a lower Body SAR

result compared to a 2 slot multislot configuration.

**Response:** Please refer to the tables below as the conclusion of worst case configuration found in Class 10 - 2 slots in uplink. The burst power of the each class has been calculated to the time average power to reflect the duty cycle of each class.

#### GSM850 GPRS

Class	Burst Power	Uplink Slots	Duty Cycle	Time average Power (mW)	Time average Power (dBm)
4/8	32.50	1	0.120	214.25	23.31
10	30.60	2	0.241	276.66	24.42
11	28.60	3	0.361	261.84	24.18
12	26.70	4	0.482	225.41	23.53

## GSM1900 GPRS

Class	Burst Power	Uplink Slots	Duty Cycle	Time average Power (mW)	Time average Power (dBm)
4/8	29.50	1	0.120	107.38	20.31
10	27.60	2	0.241	138.66	21.42
11	25.60	3	0.361	131.23	21.18
12	23.70	4	0.482	112.97	20.53

### **GSM850 EDGE**

Class	Burst Power	Uplink Slots	Duty Cycle	Time average Power (mW)	Time average Power (dBm)
4/8	27.50	1	0.120	67.75	18.31
10	25.70	2	0.241	89.53	19.52
11	23.90	3	0.361	88.72	19.48
12	22.00	4	0.482	76.38	18.83

### GSM1900 EDGE

Class	Burst Power	Uplink Slots	Duty Cycle	Time average Power (mW)	Time average Power (dBm)
4/8	26.50	1	0.120	53.82	17.31
10	24.50	2	0.241	67.91	18.32
11	22.50	3	0.361	64.28	18.08
12	20.50	4	0.482	54.07	17.33