

February 24, 2000

## RESPONSE TO SAR QUESTIONS

(Correspondence Reference Number: 12274)

Federal Communications Commission  
Authorization and Evaluation Division  
7435 Oakland Mills Road  
Columbia, Maryland 21046

Re: Application for Cellular/PCS Transceiver Certification (EA96077)

Kwok Chan & Joe Dichoso:

**Purpose:**

This document responds to questions on the submission for the IHDT56ZQ1 (EA96077) application.

**Description:**

To facilitate the response to questions, the following includes the original text and the highlighted answer.

From: Joe Dichoso  
jdichoso@fcc.gov  
FCC Application Processing Branch

Re: FCC ID IHDT56ZQ1  
Applicant: Motorola Inc  
Correspondence Reference Number: 12274  
731 Confirmation Number: EA96077  
Date of Original E-Mail: 02/22/2000

Please address the following RF safety issues. Place any exhibits in the RF exposure info folder and contact Kwok Chan.

Motorola, EA 96077 (swapped with EA 95936) -

1. Body-worn SAR was tested using a specific belt-clip. Please revise manual instructions to caution users to only use this tested belt-clip for body-worn operating configurations as other belt-clips or similar accessories that have not been tested may not comply with SAR limit for body-worn use and should be avoided. A copy of the manual page containing this info should be uploaded.

**Response: The revised manual page is attached.**

2. Please confirm the tested belt-clip is supplied with the phone.

**Response : Yes, the tested belt clip (and only the tested belt clip) is supplied with the phone.**

3. FYI - please use muscle equivalent tissue parameters for testing body-worn SAR in future filings, and also include appropriate validation and field probe calibration info. Since SAR is not close to the limit for body-worn configurations and there is sufficient margin to cover dielectric parameter differences, re-test is not requested for this filing.

3. FYI - descriptions in the two SAR reports had left and right side for peak SAR cases mixed up.

Note: Part 22 measured outputs are 165 mW ERP for AMPS and 205 mW ERP for TDMA. Part 24 output is 488 mW EIRP for CDMA. SAR was tested for two outer-case variations for this phone.

Proposed Grant Comments - Output is ERP for Part 22 and EIRP for Part 24. SAR compliance for body-worn operating configurations is for a specific belt-clip, as tested and described in this filing, to be supplied with this device.

Kwok Chan

**Contact Information:**

Thank you for this special consideration. Please contact me by telephone at (847) 523-6167, by facsimile at (847) 523-2350, or by e-mail ([A.Bachler@motorola.com](mailto:A.Bachler@motorola.com)), if there are questions or additional information needed concerning this filing.

Regards,

Andrew J. Bachler  
FCC Liaison  
Cellular Subscriber Sector  
600 N. U.S. Highway 45  
Libertyville, IL 60048-5343

## ***Hand-Held Portable PCS Telephone***

### **IMPORTANT**

#### **Read this information before using your PCS Telephone**

#### ***Exposure To Radio Frequency Signals***

Your wireless handheld portable telephone is a low power radio transmitter and receiver. When it is ON, it receives and also sends out radio frequency (RF) signals.

In August 1996, the Federal Communications Commission (FCC) adopted RF exposure guidelines with safety levels for hand-held wireless phones. Those guidelines are consistent with the safety standards previously set by both U.S. and international standard bodies:

- ANSI C95.1 (1992)<sup>1</sup>
- NCRP Report 86 (1986)<sup>1</sup>
- ICNIRP (1996)<sup>1</sup>

These standards are based on comprehensive and periodic evaluations of relevant scientific literature. For example, over 120 scientists, engineers and physicians from universities, government health agencies and industry reviewed the available body of research to develop the updated ANSI Standard (C95.1).

1. American National Standard Institute: National Council on radiation Protection and Measurements; International Commission on Non-Ionizing Radiation Protection

The design of your phone complies with the FCC guidelines (and these standards).

To maintain compliance with FCC RF exposure guidelines, if you wear a handset on your body, use the Motorola-supplied or approved carrying case, holster, or other body-worn accessory. If you do not use a body-worn accessory, ensure the antenna is at least one inch (2.5 centimeters) from your body when transmitting. Use of non-Motorola accessories may violate FCC RF exposure guidelines.

#### ***Antenna Care***

Use only the supplied or approved replacement antenna. Unauthorized antennas, modifications or attachments could damage the phone and may violate FCC regulations.

#### ***Phone Operation***

**Normal Position:** Hold the phone as you would any other telephone with the antenna pointed up and over your shoulder.

**Tips on Efficient Operation:** For your phone to operate most efficiently:

- Extend your antenna fully (if applicable).
- Do not touch the antenna unnecessarily when the phone is in use. Contact with the antenna affects call quality and may cause the phone to operate at a higher power level than otherwise needed.

