

September 19, 2012

Dr. Rashmi Doshi
Chief, OET Laboratory Division
Federal Communications Commission
7435 Oakland Mills Rd.
Columbia, MD 21046

RE: Comment for draft document KDB 447498

Dear Dr. Doshi,

Consumers for Safe Cell Phones respectfully submits the following comments and suggestions regarding KDB 447498. The comments below specifically address section 4.2 - SAR test requirements for typical exposure conditions:

Section 4.2.1 – “Head exposure conditions” (pg 8): This section must specify the maximum separation distance allowed during SAR testing at the ear. Considering that most users firmly “smash” their cell phones against their heads to be able to hear in noisy surroundings, the testing situation must simulate an ear pinna flattened against the skull. Testing for this typical exposure condition would equate to a maximum 1 - 2 mm distance allowed between the antenna and the opening to the ear canal.

Section 4.2.2 – “Body-worn accessory exposure conditions” (pg 8): It is an obsolete concept to only consider “body-worn accessories” as it is generally understood in today’s marketplace that the typical “body-worn” condition is the wearing and use of a cell phone located **directly against the body** WITH NO ACCESSORY to provide the required testing separation distance. No manufacturer can dispute this fact. Typical use positions are in a breast or pants pocket, tucked into a waistband with the back of the phone touching the body or, as is becoming more common among women, placed with the back of the phone directly against breast tissue held inside a bra.

The recent July, 2012 GAO report, Exposure and Testing Requirements for Mobile Phones Should Be Reassessed reported that, ***“FCC has also not reassessed its testing requirements to ensure that they identify the maximum RF energy exposure a user could experience. Some consumers may use mobile phones against the body, which FCC does not currently test, and could result in RF energy exposure higher than the FCC limit.”***

The report recommended, ***“FCC should formally reassess and, if appropriate, change its current RF energy exposure limit and mobile phone testing requirements related to likely usage configurations, particularly when phones are held against the body.”***

Therefore, this document KDB 447498 must clearly specify the testing positions and protocol which will simulate the typical exposure conditions of wearing and using cell phones directly against the body so consumers are no longer at risk of being exposed to RF energy that exceeds the FCC limit simply by using a phone the way they are being marketed by the industry – ***and without adequate safety warnings cautioning them against doing***

so.

In light of the above, it is necessary to insert a new **section 4.2.3** titled, “Body-worn exposure without accessory” to account for the typical use of a cell phone transmitting directly against the body (e.g. in a pocket or tucked into waistbands or bras) **with no separation** – connected to a wired or wireless headset: Testing protocol must be changed to require the back of the phone directly against the phantom.

This **section 4.2.3** must also consider the prolific and increasing consumer use of off the shelf body-worn accessories which are technically considered accessories, but which in fact, are designed to be used with no separation distance. (e.g.; cases, lanyards and straps). Most cases are simply cosmetic and for protection from damage when dropped. Very few cases are purchased for the purpose of providing the necessary separation distance as do belt clips and holsters. Even cases which claim to have been tested by FCC TCB’s to reduce exposure (as does the manufacturer of the Pong case) will actually INCREASE exposure if the case is used with the back of the phone positioned directly against the body.

In order to account for the maximum exposure in these typical exposure conditions, all cell phones must be tested directly against the phantom **with no separation distance allowed.**

Section 4.2.2. (4) – Re: providing information to users. GAO recommendations direct the FCC to test cell phones the way they are typically used – “held against the body”. And, given that this overall section 4.2 is titled, “SAR test requirements for typical exposure conditions”, cell phones must be tested for compliance without providing any separation distance. The only exception is the situation in which a manufacturer provides a holster WITH EACH CELL PHONE which has a prominent label clearly warning the user that this particular cell phone must never be used on the body except in the **provided** holster. If a holster is not provided, the manufacturer must assume the device will be used directly against the body, and it must be tested in this manner **with no separation distance allowed.**

It is clearly understood by all manufacturers that cell phones are designed and marketed to be used in pockets directly against the body; that is the typical use of a cell phone today. The FCC is mandated to test for exposure in typical exposure conditions – DIRECTLY AGAINST THE BODY. To persist with the current false assumption that cell phones are typically used held up to 2.5 cm away from the body is a violation of this mandate and continues to expose consumers to RF energy that can exceed the exposure limit.

Few, if any, consumers read the user manual, much less comply with some statement that they must purchase an accessory to maintain a “body worn separation” for compliance. Even if they DID read the information in the fine print of the user manuals, consumers will ignore it as they are deceptively led (by industry) to believe that cell phones are compliant with FCC RF exposure guidelines no matter how they are used.

There are peer-reviewed, published studies showing that cell phone use in the pants pocket causes damage to male reproductive health. Cancer surgeons are publicly speaking out about their patients who are developing unusual breast tumors in the exact location of the antenna when worn in the bra for as few as five years. It is nonsense to assume that the typical user will understand and abide by a requirement to have a separation distance for “compliance.” And, consumers are beginning to experience the health impacts from this

reckless (and most likely illegal) practice of failing to properly warn users to never use their cell phones directly against their bodies.

We strongly suggest OET follows the recommendation of the GAO and require that cell phones be tested for compliance the way they are being used – directly against the body. Manufacturers are correct that having to provide all these cautionary statements about accessories and separation distances, etc. is burdensome – and it is also correct that consumers ignore the statements.

Require that cell phones be tested the way they are being used – with the phones positioned directly against the phantom with no separation. This eliminates the need for any warnings to appear in the user manuals about separation distance required for compliance.

If the FCC refuses to require testing for compliance in “typical exposure conditions”, then there must be very clear instructions to manufacturers to discontinue the current industry-wide practice of deceptively hiding the necessary separation distance warning in the fine print of the user manual. The typical consumer does not read the user manual. Therefore, to ensure it is seen, there must be a prominent label or sticker displayed on the phone which states, ***“Never wear or use your cell phone against the body or you will be exposed to radio frequency energy that may exceed federal safety guidelines. Refer to (specific page number) in the user manual for other important safe-use instructions.”***

Apple’s latest cell phones include **NO** information about the necessary separation distance in the box that comes with the iPhone. There is a vague mention in the “fingertips guide” to download a user manual from their website **WITH NO INDICATION OF THE CRUCIAL SEPARATION DISTANCE WARNING REQUIRED FOR COMPLIANCE.**

Manufacturers must be informed in this **section 4.2.2 (4)** that failure to prominently display the separation distance warning in the packaging that comes with the device will render that particular cell phone non-compliant with federal exposure guidelines.

Respectfully submitted,

Cynthia Franklin, President
Consumers for Safe Cell Phones